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NORTH CAROLINA
MEDICAL JOURNAL.

THOMAS F. WOOD, M. D.,
GEO. GILLETT THOMAS, M. D., } Editors.

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Number 1. Wilmington, January, 1890. Vol. 25.

ORIGINAL COMMUNICATIONS.

FIBROID OF THE OVARY—ABSCESS OF THE OVARIES.

A Clinical Lecture Delivered at the Hospital of the University of Pennsylvania.

By William Goodell, M.D., Professor of Gynecology. Reported by Wm. H. Morrison, M.D.

Gentlemen :—The history of the patient before you is, that she is 35 years of age, was always healthy as a child, menstruated at the age of 12 years, married at 18, and has had ten children, the last being born about two years ago. All her labors were natural and followed by good recovery. The present trouble began four years ago with a gnawing in the right side but no actual pain. On pressure, she detected a tumor. She sent for a physician who also felt it. It was then the size of a hen's egg. The tumor has continued to slowly increase in size. The menses have not been prolonged more than usual. A short time ago the abdomen began to swell. She was tapped three weeks ago and a gallon and a half of straw-colored fluid removed.

She has been brought to us by her physician. The abdomen contains a little fluid and there is a movable tumor—apparently two tumors—but there is so much tenderness that she will not permit a careful examination without ether. I shall now examine her under ether. The diagnosis lies between a fibroid tumor of the uterus and a fibroid of the ovary. I find that the womb can be readily moved, and movement of the womb does not communicate any motion to the tumor, and, on the other hand, when the tumor is moved, it has no effect upon the uterus. This is in favor of the idea that the tumor is connected with the ovary; still it may be a uterine fibroid with a long pedicle. The tumor is quite irregular in shape.

I shall now proceed to operation, and as I was not quite certain what would be found, I have come prepared to remove the womb if that should prove necessary. The patient had the bowels opened by a dose of castor oil given yesterday. Last night she had a thorough bath and all hair on the abdomen removed. The abdomen has just been washed with a bichloride solution 1—1000. The instruments have been placed in these trays and boiling water has been poured over them. To this is now added a 5 p. c. solution of carbolic acid.

I make a free incision through the skin of the abdomen between the umbilicus and pubes, taking care to keep in the median line. I deepen the incision until the sub-peritoneal fat is reached, and then uncover the peritoneum. Before opening the abdomen all hemorrhage is controlled by the catch forceps. I now hook up the peritoneum with a tenaculum and make a nick in it. This opening is then enlarged with scissors, the finger being inserted to prevent injury to the intestines. The tumor is at once seen, and it proves to be a fibroid tumor of the right ovary. There is also a small cyst connected with it which gave the impression of two tumors. The incision must be enlarged in order to permit the removal of the growth. I turn it out of the abdomen, and, after applying pressure forceps to the pedicle, remove the mass. The pedicle is next transfixed and each part tied separately, and then the ends of one of the ligatures are passed around the whole pedicle and secured. I apply a catch forceps to the pedicle in order that I may examine it before closing the incision and let it go.

I find that the left ovary also shows evidences of change, probably of the same character as that found in the right, and I shall therefore remove it in the same way.

Having satisfied myself that there is no bleeding, I proceed to the next step, which is an important one, that is the toilet of the abdomen. I pour into the peritoneal cavity water that has been boiled and thoroughly irrigate it. The water is then removed with sponges and a sponge is placed in Douglass' cul de sac, to absorb any fluid that may collect there. Two flat sponges are placed over the intestines to protect them, and the edges of the incision brought together. The instruments and sponges are now counted in order to be sure that none have been left in the abdomen.

We are now ready to insert the stitches. The needle is passed from within outwards, and includes the peritoneum and the edge of the tendon on each side. Having placed all the sutures, their ends are grasped with forceps on each side. The edges of the wound are then separated and the sponges left in the abdomen are removed. The stitches are then tied. The incision is then dressed with gauze containing 50 p. c. of iodoform. Over this is placed a pad of cotton which has been rendered aseptic by being baked in an oven. This is held in place by broad strips of adhesive plaster, and over all is secured a flannel binder.

Nothing will be given by the mouth for the first thirty-six or forty-eight hours. This rule is absolute unless there is collapse. Under the latter circumstances whiskey may be given by the mouth. If, during this time, nourishment is thought necessary, it may be given by the rectum in the form of enemata containing milk and beef tea. The reason for not giving food by the mouth is to lessen the tendency to vomiting and to diminish the peristaltic action of the bowels. We wish everything to remain quiescent so that every bleeding point may heal. At the end of a week every alternate suture may be removed, and in a few days the remaining stitches can be taken away.

ABSCESS OF BOTH OVARIES.

Our second patient is Mrs. ———, aged 27 years. She has been married three years and was perfectly well until seven months ago, when she began to suffer with abdominal pain. Her physician, on examining her, found a pelvic tumor and brought her to me. This tumor is apparently as large as a fœtal head. Menstruation has been regular but profuse. The growth seems to resemble a fibroid tumor of the uterus. The facts, however, of the youth of the patient, the suffering which has been experienced and the presence of nodules posterior in Douglass' cul de sac are opposed to the supposition of a fibroid tumor and point in the direction of sarcoma.

The patient has been prepared for operation as in the previous case, and I shall at once proceed. I first make an incision three inches long in the linea alba, and, opening the peritoneum, I reach the omentum which covers, and is adherent to, the tumor. I carefully separate this and the growth is exposed. It is now quite clear that it is not a solid mass, but contains fluid. Inserting the aspirator needle, there is at once an escape of a quart of oderless pus. This cyst is evidently formed of the left ovary. The Fallopian tube lies behind it. The abscess wall is firmly adherent to the omentum, the colon and the womb. I have separated all the adhesions but those to the uterus. These are so dense that I think it wiser to allow them to remain, enucleating the inner wall of the cyst and tying the remainder with the Staffordshire knot. There is a portion of the omentum which shows some bleeding. I shall therefore ligate and remove it.

I find that the left ovary has also undergone suppuration and is closely adherent to the omentum, the uterus and the womb. We shall treat this ovary in the same way as that of the other side. It is also necessary to remove a portion of the omentum on this side.

We are now ready to irrigate the abdominal cavity, and in a case of this kind this must be thorough. I shall use a Davidson's syringe, introducing the nozzle and forcing the boiled water into all parts of the peritoneal cavity. I have used some six quarts of water and it now returns clear. It will be advisable in this case to use a drainage-tube. This is introduced between the two lower stitches. A wire suture is inserted between these two silk sutures, but left untwisted. The object of this is to close the opening left by the withdrawal of the tube. The iodoform dressing is applied closely around the tube and a piece of thin rubber sheeting eighteen inches square is then taken and a hole cut in its centre. This is sprung over the drainage-tube and serves to protect the dressings. A small sponge is placed over the orifice of the tube and the rubber folded over it. Several times a day the sponge is to be removed, cleansed in a 5 p. c. solution of carbolic acid and reapplied. The tube can probably be removed in the course of twenty-four hours.

The after treatment will be the same as that indicated for the previous case.

SELECTED PAPERS.

ABSCESS OF THE LIVER—TREATMENT.

By Vaughan Harley, M.D.

Read in the Section of Medicine at the Annual Meeting of the British Medical Association, held in Leeds, August, 1889.

Having enjoyed the advantage of seeing abscesses of the liver treated both in the tropical East and the temperate West, it may not be unacceptable to the profession if I describe what, I think, may with some degree of truth be designated, "A rapid mode of curing hepatic suppurations."

All having had much experience in the treatment of liver abscesses are aware how exceedingly troublesome it is to get them to close up after they have been evacuated; and that, not only does the emptied suppurating cavity occasionally refill more than once, but after a free counter-opening has been made, pus will continue to ooze away for weeks, aye, even months, equally to the discomfort of the patient and discontent of the doctor.

Several methods of treating liver abscess are at present before the profession, each professing to possess special advantages; but not one of these appears to me to be either so simple, or so successful, as that which I am now about to detail, as well as to illustrate the advantages of, by narrating the results which attended its adoption in two most unfavorable cases for treatment.

Before relating them, however, in order that the subject may be perfectly plain to those who have not paid special attention to it, I will tabulate some of the general principles in connection with liver abscesses, which teaching, reading and experience have taught me to regard in the light of pathological aphorisms.

1. That the hepatic abscesses of the tropics differ in no essential feature, whatever from the same forms of suppurations occurring in temperate zones, except in one single particular, that of relative frequency.

2. Men are far more liable than women to liver suppurations.

3. Although an abscess of the liver may occur at any period of life, it is much more common between the ages of 20 and 50 than at any other.

4. Suppurations of the hepatic tissues are most frequently met with in strumous subjects; and the most unsatisfactory cases of all to treat are those in which a syphilitic taint is superadded to a constitutional struma.

5. The most noted predisposing causes to liver abscesses are struma and alcohol—even when alcohol is indulged in within what is usually regarded as the limits of moderation.

6. The commonest of all the exciting causes is a sudden chill, as pointed out by Sir William Moore.

7. All abscesses of the liver tend to evacuate themselves by burrowing their way to the surface of the organ, and seeking an outlet for their contents either directly through the abdominal walls, or indirectly (in general) through the pulmonary or digestive systems.

8. It is futile to evacuate a liver abscess either by knife or trocar so long as a free opening is not left to give escape to the subsequently formed pus.

9. When an accumulation of pus has taken place in the liver not only tends to do serious mischief by causing disintegration of the hepatic tissues, but, from its becoming putrid, to kill the patient by blood-poisoning. This likewise occasionally happens when dyatids of the liver suppurate, which they frequently do when they contain daughter cysts.

10. Cancerous and tubercular deposits in the liver, by disintegration, sometimes lead to the formation of purulent formations.

11. As a natural corollary to these facts, I think all will admit that so soon as the existence of purulent matter is detected it should be evacuated, and the speedier this is done the better will be the patient's chances of recovery.

With these general remarks I shall now describe what seems to me to be the most satisfactory mode of operative procedure in cases of hepatic abscess.

So soon as the presence of pus is suspected, its exact situation should be prospected in the following manner: A 6-inch long fine exploring trocar is to be passed up to its hilt obliquely from right to left into the liver, or from left to right, according to which lobe the abscess is supposed to occupy. The pus is then searched for by slowly and gradually withdrawing the instrument so as to allow sufficient time for a drop to appear at its orifice. If pus be found, both its situation and depth in the organ is to be carefully noted. Should blood instead of pus flow from the trocar, the bleeding ought to be encouraged; for in all cases of suspected hepatic abscess the liver tissues are more or less congested, and marked benefit is likely to arise from a free hepatic phlebotomy. The presence of pus having been substantiated before withdrawing the exploring cannula, allow as much as possible to flow from it. As pus, especially thick pus like that usually met with in the liver, does not flow readily through a fine cannula, immediately on its ceasing to flow withdraw the exploring trocar, and introduce, in exactly the same direction and to precisely the same depth, one of the diameter of a No. 8 or 10 sized English catheter, and through it empty the abscess completely by aid of an aspirator. As soon as the cavity is empty, before withdrawing the cannula, wash it out with tepid water, containing 10 grains of boracic acid to the ounce, and continue the washing-out process until the solution returns clear and odorless. Immediately after this insert as large a sized silk elastic cather as will pass through the cannula into the abscess cavity. Now withdraw the cannula, and after having cut off the extruding end of the catheter to within an inch and a half of the opening in the abdominal wall securely fasten it there.

This done, cover the whole over with a large, hot, sloppy linseed poultice. The abscess cavity should be washed out with boracic acid solution night and morning, and poultices constantly applied until the purulent discharge almost entirely ceases. If, however, as occasionally happens, the cavity rapidly refills with pus, another opening is to be made a short distance from the first, and a second drainage-tube introduced into the abscess cavity. This counter-opening, by faciltating the washing-out process, greatly expedites the cure.

While in Hong Kong I noticed that Dr. Patrick Manson, instead of daily washing out hepatic abscesses with an antiseptic solution, relied for the complete emptying of their cavities on the employment of a yard or more long syphon drainage-tube. This I need not describe, as he is about to publish his mode of treating liver suppurations. The advantages of the mode of treating abscess of the liver now being advocated will be best appreciated, I think, by the narration of its results in two of the most unfavorable cases that it is possible for me to give.

The first case is one in which the patient very nearly died from the effects of blood-poisoning, arising from the absorption into the circulation of toxic matters from the putrid pus in the abscess. The second is one of "multiple abscess," occurring in the greatly enlarged liver of a strumous patient. Both cases, notwithstanding their exceedingly unfavorable nature, as will be seen, made rapid recoveries under the line of treatment just described.

Case 1 was that of a gentleman of delicate constitution, aged 29, who up to the age of 20 repeatedly suffered from occasional attacks of congestion of the liver, as well as from diarrhœa. He had a particularly severe attack of hepatitis while a student at Oxford in 1880–'81, and in 1883 had an empyema of the right side, and, not regaining his strength after it was evacuated, he was sent on a long sea-voyage.

The suppuration of the liver, about which I have now to speak, seems to have begun in the latter part of 1887 and beginning of 1888, while he was residing at Cannes. From notes of his case, kindly furnished to me by Dr. Clemow, it appears he had pleurisy of the right lung associated with the liver disease. In February, 1888, he had three distinct rigors; and Drs. Frank and Clemow, suspecting liver abscess, explored the organ in three places on the 19th of that month, but found no pus. That same night the patient had another very severe rigor, and, as the symptoms did not improve, and still pointed to hepatic suppuration, they again explored with a larger aspirating needle on March 10th, but again with a negative result; so they deemed it advisable to practise hepatic phlebotomy, and drew off between four and five ounces of dark venous blood. This bleeding, small though it was, acted most advantageously, for after it the symptoms rapidly improved, the temperature becoming and remaining normal, the liver dullness diminishing, and the patient gaining flesh.

In the month of June, after his return to England, the patient again became very ill, complaining of constant hepatic pain, shortness of breath, loss of strength, and exhausting feverishness.

On July 18th Dr. McEnery, of Sherborne, brought him to London, and consulted Sir Andrew Clark and Dr. George Harley. The former, after carefully examining the lungs, pronounced them comparatively healthy; the latter found the liver diseased, its left lobe being not only enlarged and indurated, but conveying to the hand the feeling as if it contained a deeply seated tumor.

At this time the patient was exceedingly weak, both in body and mind; his intellect, indeed, was so perturbed and his memory so defective that he could give no intelligible account either of his past history or present symptoms. He had even forgotten the names of his doctors, or that he had ever had either shiverings or sweatings; notwithstanding that both had been very marked. The cause of this great mental confusion was afterwards found to be due to the toxic effects on the brain of blood-poisoning.

The result of the consultation having led to the conclusion that the tumor in the left lobe of the liver was probably an abscess, it was aaranged that an exploration should be had recourse to. Accordingly, on July 23d, Dr. George Harley, in the presence of Dr. McEnery and myself, performed the operation. The patient's temperature at the time was 102° F., his pulse 108, and he had profuse sweatings, without, however, any diarrhœa. His face was of a cachectic yellowish livid color, and wore a most anxious expression. The liver dullness reached, as shown in diagram (Fig. 1) from the right nipple to the navel, and projected at least two inches and a half to the left of the mesial line.

The effect of the poultices, which had been assiduously applied since the consultation on the 18th, had proved most favorable, for now there appeared to be an indistinct fluctuating area surrounded by a hard rim about one inch and a half directly above the navel (Fig. 1, *a*).

On a large-sized aspirating needle being introduced into the centre of this doubtfully fluctuating area, a quantity of extremely fœtid, blood-stained, putrid pus made its appearance. So offensive was its odor that not only was it almost intolerable to us three medical men, but even the patient, ill though he was, held his own nose, a very unusual thing, as Dr. George Harley remarked, seeing that people can in general tolerate the bad smells emanating from their own bodies much better than anyone else. Even the silver cannula, although it was not twenty minutes in the abscess cavity, was rendered jet black by the sulphuretted hydrogen the pus contained.

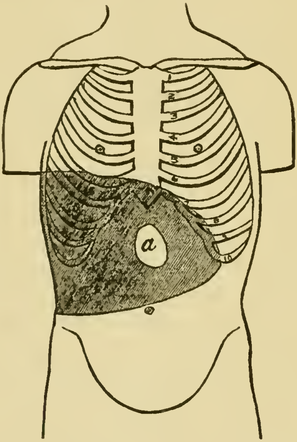

Fig. 1.—The dark area denotes the liver dullness extending from the nipple to the umbilicus, and three inches to the left of the mesial line; *a* is the point at which pus was suspected, and afterwards ascertained to exist, and through which it was subsequently evacuated with a trocar.

After about 18 ounces of pus had been removed, the abscess cavity, appearing to be pretty well emptied, was washed out with a tepid water solution of 10 grains of boracic acid to the ounce until the solution returned clear and almost odorless.

A drainage-tube was then inserted into the cavity, which measured in a direct line backwards 5½ inches in depth, and a hot poultice applied. It was noticed that immediately after the abscess was emptied the abdominal walls receded, and left a saucer-shaped depression round the seat of the wound. The pus, on standing, separated into three distinct layers: an upper one of a dirty yellow color, a middle one of a pale green tint, and a lower stratum of a decidedly pink hue. Under the microscope, besides pus and blood cells, I found a great many large exudation corpuscles.

By the following morning a marked improvement had taken place in the condition of the patient. The pulse, instead of being 108, was only 99, and his temperature had fallen two degrees, that is to say, to 100°. The discharge was, however, still very fœtid, so that the cavity had not only to be washed out night and morning with boracic acid solution, but an antiseptic mixture of sulphate of iron and quinine given to the patient.

The next day a still more decided change for the better was observed, his temperature being only 99°, although the pulse remained about the same, namely, 99 per minute. On the fourth day, in spite of the drainage-tube acting well, the abscess cavity had refilled with putrid pus; so Dr. George Harley made a second opening with a No. 10 sized trocar, about two inches from the first, and introduced another drainage-tube into it. These two openings enabled the cavity to be thoroughly washed out; for, while the boracic acid solution was pumped in at one, it flowed freely out by the other opening. From the second being also a somewhat larger drainage-tube than the first, it more readily permitted the numerous small blood-clots and pus-flakes to come away. On the fifth day the temperature was normal and the appearance of the patient greatly improved. The exhausting sweatings had ceased. The pus, though now thin and only slightly fœtid, was still so copiously discharged that the poultices were discontinued and absorbing wool used in their stead.

On the 29th, that is to say, six days after the first operation, the discharge ceased to be fœtid, and the abscess cavity was so greatly diminished in size as only to admit the probe one inch and a half, the patient being, at the same time, able to leave his bed and recline on the sofa. The following day he was well enough to get up to breakfast and to eat with an appetite a couple of eggs along with bread and butter. He said he now tasted the flavor of his food, everything previously having tasted as if it was fœtid. Moreover, the confusion of ideas no longer existed, and he had regained his memory. The appearance of his face, too, was entirely changed; the cachectic hue had disappeared, and was replaced by a healthy color. The most curious thing, however, was that not only had the saucer-like depression over the seat of the abscess vanished, but the cavity itself seemed to have become filled up with liver tissue! At least, the sensation yielded to the hand in that situation in no way differed from that communicated to it by any other part of the liver. The discharge, too, was now so slight that the boracic solution returned quite clear.

Having to start next day for China, I handed the case over to the care of Dr. Cullimore, and from this point the notes are taken from my father's case-book.

August 4th.—Although it is only the twelfth day since the operation the patient is so well that he returns to the country along with Dr. McEnery to-day. A probe now merely penetrates about half an inch into the liver, if it even does so much as that, for the thickness of the abdominal parietes being in this case an unknown quantity it is impossible to say exactly how far the probe enters the liver substance.

On August 17th the patient came to town looking perfectly well. He says that he eats with a good appetite, has gained a stone in weight, and feels himself every day getting stronger. There is only a drop of discharge from each of the wounds, and that probably comes from the abdominal walls, and not from the liver at all.

September 29th.—The liver is quite normal in size. He has no pain or discomfort whatever, even when he walks, rides, or drives. So he may be said to be perfectly well.

P. S.—April 25th, 1889. Have to-day heard that he is well and strong; stronger, indeed, and in better health than he has ever felt before. The last news I have of him (July 15th) is that he is engaged to be married.

Case 2 is one of another kind, being one of multiple abscess in a strumous patient aged 17. The lad, who is the son of a Lincolnshire farmer, is described as having been suddenly seized with a pain in his liver, associated with sickness and shivering, in June, 1888. On September 3d, after walking twelve miles with a drove of cattle, he felt so ill that he had to be brought home in a carriage and placed under the care of Mr. Heaven, of Colsterworth. The following history of the patient I abridge from Dr. Cooper Key's notes of the case: On September 18th "I saw him in consultation with Mr. Heaven. He was very pale, with a small, weak, and frequent pulse. His temperature was 102°. Tongue coated; bowels irregular, with occasional attacks of diarrhœa and a good deal of pain over the hepatic region. In addition, there was a considerable amount of fluid in the cavity of the peritoneum, and a slight *bruit* over the left base of the heart."

The patient was subsequently seen by Mr. Newman, of Stamford, who, suspecting hepatic abscess, explored the liver in two places, but found no pus. Early in November the symptoms being urgent, he was sent to London to consult Dr. George Harley. On November 19th, the patient being placed under the influence of A. C. E. mixture, Dr. George Harley, assisted by Mr. Heaven and myself, proceeded to operate, making eight punctures into the liver with his long trocar without obtaining pus. The liver being exceedingly large, measuring four inches to the left of the mesial line, and two beneath the umbilicus, phlebotomy was attempted, but only a very little blood was obtained. During the night, however, profuse

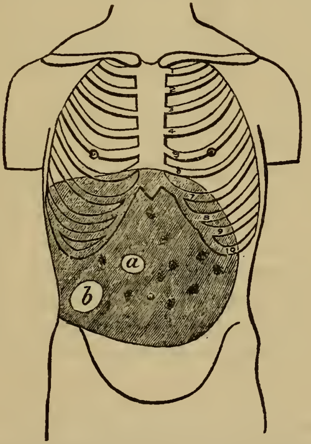

Fig. 2.—The dark area represents the extent of liver dullness, from the nipple to two inches below the umbilicus, and four to the left of the mesial line. The dots indicate the points at which the exploring trocar was introduced; *a* is the seat of the first abscess, evacuated November 25th; *b* the seat of the second abscess, emptied November 28th.

hemorrhage took place through the bile-ducts into the intestines, and at 4 o'clock in the morning I found the patient in a state of collapse. In two hours (after the administration of brandy) he rallied, and, somewhat to our surprise, the bleeding was followed by the most satisfactory results, as within thirty-six hours the liver's dullness had diminished an inch and a half all round.

On November 25th appeared a circumscribed swelling two inches above and slightly to the right of the umbilicus, with a feeling of deep fluctuation; and Dr. George Harley explored it, and was successful in hitting the abscess. It contained very viscid pus. A short length of a silk elastic catheter was then placed in the cyst, and it was washed out twice daily with a 10 grains to the ounce solution of boracic acid. The temperature was 103°, and pulse 120. During the next few days the pus became very offensive, and carbolized tow was placed over the poultice to catch the discharge, which was very profuse.

On November 28th a second abscess appeared in the right lumbar region on a level with the umbilicus. This was opened and found to communicate with the other. A drainage-tube was passed into it, and the boracic acid solution used twice daily to it also. The temperature was now 101°, the pulse 112, and the discharge thin and less fœtid.

November 30th.—Temperature 100°, pulse 108.

December 1st.—A slight rigor. Temperature 101°, pulse 102.

December 3d.—Temperature fell to 100°, pulse 100.

December 21st.—Temperature 98°, pulse 80. No longer any discharge.

January 2d, 1889, that is to say, on the 28th day after the first abscess was opened, the patient returned to his home in Lincolnshire, a distance of 120 miles, without a single bad symptom.

In a letter from Mr. Heaven, dated may 12th, he says: "G. is gaining flesh and strength rapidly, and going about as usual. There is no pain or tenderness about the liver, except a little on pressure over the seat of the abscesses."

Not only do I consider the rapidity of the recovery in this case remarkable, but that any recovery should have taken place at all, in such a weakly constitutional strumous patient, seems to me surprising; all the more so when I mention that so great is the tendency to suppurations in the lad that Mr. Heaven says, in a letter dated August 1st, that he had a few days before drawn "off a large saucerful of thick pus" from his left side—the exact seat of the suppuration not being specified.

When all the foregoing facts are taken into consideration, I scarcely think that anyone who has had much experience in treating abscesses of the liver can fail to be struck with the satisfactory results in the above cited cases, as two more unfavorable ones for any line of treatment whatever it would be difficult to find. It is, indeed, on this very account they were selected to illustrate the advantage of treating liver suppurations in the manner I have described, and which may be briefly summed up in the three following sentences: First, by the employment of boracic acid we have not only the assistance of a thoroughly safe antiseptic agent, but the great advantage which accrues from the use of one free from the objection of coagulating the albuminoids in the pus, and thereby inducing a fouling of the instruments, such as is unfortunately the case with carbolic acid and most other antiseptic preparations. Secondly, the daily washing out of the abscess with boracic acid solution not only expedites the healing process by keeping it clean, but has the further advantage of rendering it quite unnecessary to take any precautions against the intrusion of air into the cavity, no matter how large it is. Thirdly, the washing out of the abscess with boracic acid solution, from its enabling us to get rid of all the purulent matter, thick as well as thin, does entirely away with the necessity of making a large opening either in the abdominal walls or liver tissues with a knife or other instrument—a point of no mean moment, seeing that it is a well recognized axiom that the smaller the breach of continuity in any animal tissue, no matter whether it has been made accidentally or intentionally (other things being equal), proportionally quicker is the healing process.

Dr. George Harley, in reply to the question of the danger from hemorrhages arising after exploring the liver, said that no doubt there did exist danger, but only when the explorations were improperly performed; for, as he had explained at the meeting at Brighton, when Professor Boyes Smith related his case of hemorrhage into the abdominal cavity after exploring the liver for abscess, the danger only arose when the instrument was thrust into the liver at a point of the organ where pressure could not be applied by bandaging the abdominal walls sufficiently tightly to make them close up the opening of the puncture into the liver. He need not repeat his remarks on the subject, as the whole matter had been fully gone into in a paper published in the *Journal* in reply to Dr. Boyes Smith's criticisms upon his paper on Hepatic Phlebotomy, read at the Brighton meeting.—*British Medical Journal.*

TREATMENT OF MEDICAL EMERGENCIES—SYNCOPE—APOPLECTIC SEIZURE—CONVULSIONS—LUNG HÆMORRHAGE—NASAL HÆMORRHAGE—GASTRIC AND INTESTINAL HÆMORRHAGE—ASPHYXIA.

By James Tyson, M.D., Professor of Clinical Medicine, University Pennsylvania, Visiting Physician to the Hospital, etc.

The surgical emergency has been the subject of numerous addresses and papers, but the medical emergency has rarely, if ever, received systematic consideration. Yet the instances in which it demands treatment are scarcely less numerous than in the case of the former. By medical emergencies I mean (1) syncope or fainting, (2) the apoplectic seizure, (3) the convulsion, whether caused by epilepsy, Bright's disease, peripheral irritation, or hysteria; (4) the lung hemorrhage, (5) the nasal hemorrhage, (6) the gastric and intestinal hemorrhage, and, (7) asphyxia or suffocation.

Beginning with the simplest of these emergencies, the fainting fit, it may be defined as a state of sudden unconsciousness, accompanied by extreme feebleness in the heart's action. It is the result of some profound impressions upon the heart, either directly or through the nervous system. The former has its illustration in the effects of embarrassment of the heart's action from diseased muscle or valves, and is by far the most serious form of syncope. Similar is the effect, too, in certain drugs, as aconite. The latter, or indirect (through nervous influence), is seen in the effect of fright, extreme pain, fatigue or mental emotion, excited in various ways, as by the sight of blood during an operation, or by witnessing suffering in another; excessive heat operates similarly to produce fainting. As an intermediate cause, operating either directly on the heart or through the nervous system, or both, is hemorrhage.

1. In fainting, unless it be fatal syncope, the heart does not cease to beat. Its action is simply so feeble, and the quantity of blood it jets out is so small, that not sufficient is sent to the brain to maintain consciousness, or to the arteries to produce a pulse. The loss of consciousness is, therefore, also preceded by blindness, and if standing, the victim falls heavily to the ground. The effect on the pulse at the wrist is either to cause an entire absence or extreme smallness. There is also extreme pallor and lowered temperature. The duration of the attack is various, from a few seconds to many hours, or more rarely the patient never comes out of it, as where it is due to heart disease, as the fatty heart, aconite poisoning, or hemorrhage—fatal syncope.

In the treatment of syncope, the first step is to place the patient in a recumbent position flat on the back, with the head low. The clothing should be loosened around the neck and body, the access of fresh air should be freely permitted, and to this end persons should be kept at a distance. Diffusible stimulants, as aromatic spirits of ammonia, and brandy or whiskey should be administered, or strong ammonia may be inhaled. Cold water may be dashed in the face, the respiration being thus excited and in turn the heart caused to beat. If recovery ensues, the heart's beat becomes more distinct, the pulse reappears at the wrist, and consciousness slowly returns. It is only in cases where the heart is too badly damaged, as where there is fatty metamorphosis of its muscular fasciculi, or its valves are badly diseased, or where too much blood is drawn off, that resuscitation fails to take place.

The extremest measures required to overcome syncope are those employed in the resuscitation from drowning, the consideration of which scarcely comes within the purpose of the present paper, although such an accident is truly a medical emergency.

2. The apoplectic seizure is a more dangerous condition. Accompanied like fainting by unconsciousness as an essential symptom, it is due to a very different cause. There is here too much blood in the brain, either within or without the bloodvessels. In treating it the patient requires to be bolstered up, the head high and the blood kept out of the brain as much as possible. In the true apoplectic seizure, with even a moderately strong pulse, blood is to be taken from the arm freely, sixteen ounces or more. Simultaneously an aperient, which in the absence of consciousness must be one of

which the dose is small, as one-sixth of a grain of elaterium in pill or powder, or a couple of drops of croton oil in a teaspoonful of sweet oil or glycerine. A large enema to which an ounce of turpentine is added, is useful. Ice to the head—an ice cap—may be of use. Of less service is counter-irritation to the nape of the neck or the temple by a blister.

3. There is no symptom more alarming than the convulsion. Beginning with a distortion of countenance, due to clonic muscular contraction of the face muscles, which rapidly invades the entire voluntary system, and is as promptly followed by unconsciousness, the victim mostly falls heavily to the floor, although he is sometimes warned by an aura which permits him to seek a place of safety. Serious injury, and even death, may be caused by the fall itself.

In treatment, the first steps are measures to prevent the biting of the tongue, which is unfortunately often too early a result to be averted, being caused by a primary and sudden closure of the jaw muscles. A piece of wood, a clothes-pin, or a cork secured so as to prevent its being swallowed, or a towel thrust into the mouth will answer the purpose. Then the patient's clothing is to be loosened, as in fainting, and he is to be restrained from such motion as may result in further injuring himself.

Additional treatment depends much upon the cause of the fit. If it is due to epilepsy, the above includes about all that can be done, as we know of nothing which will shorten such a convulsion, and I am speaking now of the treatment of the fit itself, not its prevention. If due to reflex irritation, as teething in children, or an overloaded stomach, the gums should be lanced in the former instance, and vomiting secured in the latter. The difficulty is to introduce the emetic, but frequently irritation of the fauces by the fingers or a feather will have the desired effect. Should the fit continue, a movement of the bowels should be brought about by an enema. In all cases in children, immediately after the cessation of the fit, if the bowels have not been moved during it, an aperient should be given to remove irritating matter in the alimentary canal, since this may avert a recurrence. Among such irritating matter are to be included the various intestinal worms.

If the convulsions are due to Bright's disease, a more active treatment is necessary. If it be puerperal nephritis, in addition to the measures taken to protect the tongue, the first step is undoubtedly to bleed from the arm, and if the convulsions continue, chloroform should be inhaled. The same effect is often as well obtained by chloral. Indeed, the action of this remedy is often magical in controlling a convulsion. It is best administered by enema, and 60 grains may be thus given without hesitation, to an adult, and smaller quantities proportioned to the age to those who are younger. Even in Bright's disease *not* due to pregnancy, when the pulse is full and strong, blood may be taken from the arm, or if it is feared to do this. a hypodermic injection of pilocarpine, $\frac{1}{4}$ grain, repeated in a few minutes if not followed by sweating; or if this be not at hand, a hot air bath or a steam bath. The latter is easily extemporized by filling bottles with hot water and wrapping them in cloths wrung out in hot water, and placing as many as possible alongside of the body and between the legs. The sweating thus induced may be kept up as long as the convulsions last or recur. An enema should also be administered if it is known that the bowels have not been recently moved.

The hysterical convulsion requires a different treatment. First, as to its recognition, which is important. It is always less sudden than the epileptiform convulsion, however induced, and, unlike the latter, also, is apt to be preceded by some premonitory symptom, such as a sense of suffocation or extreme nervousness, and, unlike the epileptic, the hysterical girl is not apt to fall in any place, but topples over in a situation where she cannot be harmed by the fall. The convulsion may be ushered in with a sharp cry, but the patient never bites her tongue like the epileptic. Nor need we be afraid that she will otherwise injure herself. Very characteristic of the hysterical convulsion is opisthotonos, the patient often resting on her heels and the back of her head, forming thus with her body a complete bow. Although there is often an indescribable appearance of conscious action in the behavior of the subject of the hysterical fit, there is, nevertheless, as often an insensibility to painful impressions which is astounding. Thus a pin may be plunged deep into the flesh without exciting response, and pinching may be practised mercilessly and the patient is not disturbed. Electricity, either in the shape of the direct galvanic current, occasionally interrupted, or of faradization, is, however, often felt, and will generally cause the convulsion to cease. In other cases less unusual measures are sufficient, such as douching the patient with cold water, especially if the water be allowed to fall from a height. When the convulsion subsides it is apt to do so rather suddenly without an intervening period of drowsiness or sleep, as is the case with the epileptic convulsions. The possibility of mixed epileptiform and hysterical convulsions is to be remembered.

4. The next of the medical emergencies to be considered is the lung hemorrhage. It may be worth while to state that hemorrhages from the lungs, which are in the main confined to tubercular consumption, occur in two different stages of the disease, and have a very different significance. They may occur early, when the blood-vessels in the neighborhood of a tubercular infiltration, weakened by a tubercular deposit in their walls, yield to a distention from collateral hyperæmia. In such a case the hemorrhage is rarely large, and so far from being harmful is often a relief to a congestion producing dyspnœa and oppression. The greatest danger is the irritation, and even inflammation, which may be brought about by the presence of small coagula in the bronchioles and their insufflation into still previous air-vessels. This danger escaped, the hemorrhage is harmless.

The second form of hemorrhage is much more serious. It occurs late in the disease and is due to ulceration through the coats of a blood-vessel of considerable size, the vessel being either in the walls of a cavity or traversing it. Such a hemorrhage is dangerous and not infrequently fatal. Prompt measures are therefore to be taken to relieve it. The thorax should be kept raised and absolute quiet should be observed. This is further secured by a full dose of an opiate if it be well borne by the patient. Of internal remedies the time-honored one of common salt is of uncertain value, but in the absence of anything else may be swallowed in the dose of a teaspoonful, repeated in a few minutes if the hemorrhage continues. Gallic acid in 15-grain doses every ten or fifteen minutes is a more rational measure, and should be substituted for the salt as soon as it can be obtained. Hypodermic injections of ergotin in doses of 5 to 10 grains in water may be given simultaneously, and should be repeated daily or twice daily where the tendency to hemorrhage continues. Their object is to bring about contraction in the blood-vessels. Other astringents, such as acetate of lead, in 3-grain doses, may be used under the same circumstances, as it would not be safe to use this drug in any quantity sufficient to bring about an immediate effect. The application of cold over the bleeding site is especially recommended by German clinicians, but one must be sure first of the situation, which is not always easily ascertained. Sometimes the patient is able to indicate it quite precisely, at others not. Sometimes auscultation may discover subcrepitation over the seat of hemorrhage. Cold should be applied in the shape of ice in bladders or rubber bags, so that the clothing shall not become damp, or of cloths wrung out in cold water. A more extreme measure, to be resorted to when others fail, is to throw a ligature around the larger limbs cutting off the return of blood by the veins while the outflow through the arteries is still permitted. Such a course will withdraw blood from the lungs and lessen the tendency to hemorrhage.

5. Hemorrhage of the stomach and bowels occurs usually either in cirrhosis of the liver or in typhoid fever. When due to cirrhosis the hemorrhage is either from the stomach or upper part of the small intestine. When due to this cause it is more apt to be a capillary oozing, although sometimes quite copious. Under these circumstances blood is both vomited and discharged by the bowel. Such hemorrhages are also not infrequently a relief to the portal congestion. Often they may be permitted to subside of themselves. When treatment is required it is more promptly efficient than that for hemorrhage from the lungs, because more directly reached. Tannic acid may be given in 15-grain doses every 10 or 15 minutes, or at longer intervals, according to circumstances. In the absence of this drug even alum may be used in the proportion of a teaspoonful to a glass of water, and taken in four doses at short intervals. Hemorrhages from the lower bowel occur from typhoid fever and are much more dangerous. The immediate cause is ulceration through a blood-vessel of smaller or larger size. They are always regarded as a serious complication of typhoid fever, but recovery is still not infrequent. Serious symptoms are a reduction in temperature, loss of pulse, and other signs of collapse.

Hemorrhages from the bowel are treated by absolute quiet, cold compresses, or ice-bags to the abdomen, and the use of food the most bland and unirritating. Indeed, the intervals between food should be made as long as possible. It is doubtful whether drugs administered by the mouth reach the seat of hemorrhage in typhoid fever, but tannic acid may be given as in hemorrhage from the stomach, large doses being very much more apt to enter the bowel.

6. Nasal hemorrhage frequently calls for the physician's aid. It occurs also in connection with typhoid fever and cirrhosis of the liver, but also in association with heart disease, and sometimes cannot be accounted for. The simplest measures for its relief are snuffing up cold water or solution of alum in water, a teaspoonful in eight ounces, injecting hot water into the nasal passages, and the use of ice externally. The dropping of a cold key down the back of the neck is a domestic remedy whose success is not without a rational explanation. The sudden impression of the cold key through a reflex action may cause a contraction of the blood-vessels, and then the hemorrhage ceases. Plugging the nares with a Bellocq's canula or other means should be practised when all else fails.

The checking of nasal hemorrhage, or, indeed, of all hemorrhage, is aided by keeping the patient quiet in bed, and sometimes when there is a tendency to recurrences it is necessary to keep him on his back for several days.

7. Suffocation or asphyxia, for whose relief the physician is often called, is a term applied to the effects of suspended breathing, whether the result of interference with that function or of the introduction of the so-called irrespirable gases, by which are meant gases incapable of oxygenating the blood, although in the case of many there is added a specific poisonous effect. The former include such gases as hydrogen and nitrogen, the latter carbonic acid, carbonic oxide, chlorine, sulphuretted hydrogen, and chloroform vapor. Submersion in a liquid medium, as in drowning, acts similarly. In fact, it is for asphyxia due to such causes as the irrespirable gases and drowning that the physician is called. Sometimes it is on account of obstruction of the air-passages by foreign bodies, or, as in the case of the new-born infant, of pressure on the trachea and thorax. The phenomena first noted are those of forced respiration accompanied by forced lividity of the skin and mucous membranes. The increased effort at breathing is due to the circulation of non-oxygenated blood through the medulla oblongata, which is the respiratory centre, as well as through irritation of the peripheral branches of the vagi. These phenomena are succeeded by convulsions if the patient is not relieved, and finally the respiratory centre becomes paralyzed. This termination is, however, not only subsequent to the paralysis of the reflex convulsive centre (the spinal cord), but also to the brain lesions. Hence the patient remains

conscious almost to the end, or, at least, until the convulsions set in.

The successful treatment of asphyxia depends upon the fact that the heart continues to beat long after respiration ceases, and upon this fact, too, depends the wonderful capacity for resuscitation which exists in those apparently drowned or otherwise apparently dead from suffocation. The first indication is, of course, to supply oxygen, the want of which is responsible for all the symptoms. If there is obstruction of the air-passages by a foreign body, it must be removed, or tracheotomy must be performed. If the action of the muscles of respiration is interfered with, the interfering cause must be removed. If the patient is in an atmosphere of scanty oxygen or of irrespirable gases, he must be removed to fresh open air. In slighter degrees of asphyxia, such as are seen in the new-born infant, slapping the face with the bare hand or with a wet towel, or dashing cold water upon it will often have the effect of exciting the breathing act and of aërating the blood. If these measures are insufficient, then artificial respiration must be practised by some one of the usual methods, as that of Sylvester or Marshall Hall. In apparent drowning, faradization or galvanism of the phrenic nerve may be used, especially one pole being placed over the nerve as it crosses the scalenus muscle at the root of the neck, and the other at the epigastrium. Finally, disagreeable as it is, I am confident I have seen mouth to mouth insufflation in the new-born infant produce the first stimulus to inspiration which was the initial element in resuscitation. In the case of others, of course, as the apparently drowned, at any age, it is not to be relied on.—*University Medical Magazine.*

EDITORIAL.

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THE STUDY OF ANATOMY NEGLECTED—RESULTS OF THE ANATOMY EXAMINATIONS FOR THE YEARS 1887, 1888 and 1889—A LIST OF QUESTIONS IN ANATOMY FOR 1889.

We have before us a very interesting letter from Dr. P. L. Murphy, the Examiner in Anatomy of the present Board of Medical Examiners, a part of which we are at liberty to use, and we do it principally to show how much neglect there is in teaching anatomy to medical students in some of the schools.

In 1887 forty-six men applied for license. Of this number 33 obtained license, 13 failed, 14 passed on anatomy; that is to say 14 answered, by estimation, 70 per cent. or more of the questions asked, 32 fell below 70 per cent. In 1888 there were 51 applicants, 36 obtained license and 15 failed; 35 failed on anatomy and 16 passed. In 1889 there were 50 applicants, 37 obtained license, 13 failed; 31 failed on anatomy and 19 passed. The above is expressed in the following table :

Year.	Number of persons applying for license.	Number who obtained license.	Number who failed to obtain license.	Number who answered 70 per cent. or more in Anatomy.	Number who answered less than 70 per cent. in Anatomy.
1887.	46	33	13	14	32
1888.	51	36	15	16	35
1879.	50	37	13	19	31
Total.	147	106	41	49	98

It will be seen by the above that just one-third of the applicants passed their examination, and Dr. Murphy says that there was only one who passed in anatomy and failed to get his license. He points out, though, that there has been an improvement in the number who passed in this branch, being, in 1887, a little less than a third, and in 1889 a little more. He seems to be impressed with the idea, and we agree with him, that, as a general statement, the applicants who are well-grounded in anatomy are also better prepared on other subjects, and that the increasing thoroughness at the medical schools is showing itself in this direction. It is only a beginning, however, and we are of the impression that the increased ratio of better preparation on anatomy in 1889, was due to the considerable number of University of Virginia men.

The questions given below are for three separate years, and the value of each question was printed below it; this we omit :

Examination on Anatomy before the North Carolina State Board of Medical Examiners.

First Year.

Ques. 1. Describe the *inferior maxilla.*

Ques. 2. Describe *elbow joint ;* name and give attachments of the ligaments of the joint.

Ques. 3. Name the muscles of *shoulder*; their origin, insertion and action.

Ques. 4. Describe the *popliteal* artery; its relation and branches.

Ques. 5. Describe the *spermatic veins*, and indicate the difference, if any, between the right and left.

Ques. 6. What nerves form the *lumbar plexus?* Give the position, relations, etc., of this plexus and the course and distribution of the *genito-crural nerve.*

Ques. 7. Describe the *annular anterior ligament* (of wrist).

Ques. 8. Describe the *crystalline lens* and its capsule.

Ques. 9. Describe the *lungs*—their position, size, shape, lobes, etc., and also the structure of the lungs.

Ques. 10. Give the boundaries of the *perineum.*

Second Year.

Ques. 1. Describe the lower extremity of *humerus* and the *upper* extremities of *radius* and *ulna.*

Ques. 2. Name and give attachments of the *ligaments* of *shoulder joint.*

Ques. 3. Name and give origin and insertion of the five muscles of *anterior femoral region.*

Ques. 4. Describe the *arch* of *aorta* (ascending and transverse), its relations and branches.

Ques. 5. Describe the coats of *arteries.* Of *veins.*

Ques. 6. Give origin, course, relation, branches and distribution of *great sciatic nerve.*

Ques. 7. Name and describe the *lining membrane* of the *thorax.*

Ques. 8. Describe the *stomach*—its size, position, divisions, relations and its coats—and give structure of the coats.

Ques. 9. Name and give position of *salivary glands* and their *ducts.*

Ques. 10. Describe the *maleurethra*—its divisions and the other points of interest mentioned by anatomists and surgeons.

Third Year.

Ques. 1. Describe the *zygomatic process* of temporal bone including the *glenoid fossa.*

Ques. 2. Name and describe the *ligament* of the *hip-joint.*

Ques. 3. Give the origin and insertion of the *external oblique* muscles of the abdomen, the *internal oblique*, the *recti* and the *diaphragm.*

Ques. 4. Describe the *palmar arches*—their position, relations and branches.

Ques. 5. Describe the *portal circulation.*

Ques. 6. Describe the *dura mater*—its *processes;* also the other *membranes* of the *brain.* Describe a *spinal nerve.*

Ques. 7. Describe the *lachrymal apparatus.*

Ques. 8. Describe the right side of the *heart;* the lining and investing *membranes* of the heart and its position in the thorax.

Ques. 9. Give a description of *femoral ring* and the relations of blood-vessels, nerves and spermatic cord or round ligament to the ring.

It is due to medical students, as well as to medical colleges, to bring all these items to their attention, that they may know what to expect in anatomy examinations. This is the place to say, also, to the medical profession, that, in the selection of a new Board in 1890, it is very necessary to the success of our educational movement, that we should choose with great discretion the successors of the present incumbents. In North Carolina we have the privilege of the selection of our Board from the profession quite independent of political alliance or embarrassment, and we can and must choose the best men on our Board, regardless of age or section. But of this more hereafter.

A NEEDED REFORM IN THE CORONER'S LAW.

The interest that medical men have in inquests, excepting those that are held over bodies evidently dead from wounds, consists in determining, as far as possible from the evidence given the jury, whether it was probable that death ensued from the administration of poison or poisons. It is clear that when two physicians, competent to serve, that is, are licentiates of the Board of Examiners, have been summoned and heard the testimony, if in their judgment the probability of murder by the administration of poison, they will have discharged their duties to the Coroner when they have rendered the decision, and have, by proper dissection, taken out such of the viscera as may be necessary for the chemist's work and prepared them for transportation.

But the laws of 1889 have so changed the provisions of the code that the State's Chemist is no longer liable to be called on to do this work of analysis; and when the physicians have handed over to the Coroner the sealed vessel containing the viscera suspected to contain the poison, he, with the Chairman of the County Commissioners, must seek at large for an analyst to unravel the secret, and public justice must wait for the finding of such a man, and until everybody deeming himself capable of such work has been applied to for a bid to undertake it.

There can be no question that it is the duty of the State to provide certain and constant means for the rapid and intelligent administration of justice—justice to the people and to the criminal arraigned at the bar. It will not be amiss to illustrate these statements by the recital of events lately occurring in Brunswick County. A woman died suddenly and under circumstances so suspicious as to warrant the arrest of her husband, and the ordering of an autopsy to be held. Two physicians from Wilmington, properly qualified, after hearing the testimony, did the post-mortem, and extracted the stomach and duodenum from the body, carefully preserving the contents of both viscera as directed by the law. The Coroner, under instruction of the Chairman of the County Commissioners, carried the suspected remains to Raleigh to the State's Chemist, to be told upon arrival there, that by an amendment of the law of 1887 the duty of making such analysis no longer devolved upon this officer of the State, and that the officers of the Courts would be forced to look for such aid from private sources, and the treasury of the county taxed for the employment of the expert. No notice had been served upon any county that such change had been made, and if it appeared in a newspaper, it was so disguised as to escape the observation of interested parties. The subsequent history of the case alluded to may be told in a few words. Failing to get the relief expected at Raleigh, several chemists were applied to; but it appeared to the Commissioners of the county where the murder is said to have been done that the fees for the work were too much, and they elected to give the work to an *inexpert* chemist for a pitiful sum and have the life of a human being put in jeopardy by an analysis, so called, that makes the whole procedure a travesty on justice.

In the exceeding desire to do justice to his employers, this chemist claims to have found in large quantities three virulent poisons and three others in smaller amounts. Suffice it to say that so unintelligible was his explanation of his modes of analysis, the claim being made that acetic and nitric acids were the only acids used, and bichlorate of soda the only alkali; that the prisoner was acquitted, largely, if not entirely, upon the wretched attempt to prove the presence of poisons by a person not in possession of the knowledge requisite for the work or the apparatus to conduct the examination. Now, what are the thoughts that come to every right thinking citizen when such a state of affairs exists? A woman dies under suspicious circumstances, and there are reasons enough among the neighbors to make them believe the husband was anxious to be rid of this woman—his wife.

An inquest is held, an autopsy made, and the man stands charged with murder and his life is put in jeopardy. The deceased was not seen by any medical man until twenty-two hours after death, and the autopsy was made because, relying upon the truthfulness of the witnesses present at the time of the fatal sickness, the physicians thought it proper that an investigation should be made by an expert chemist to determine the presence or absence of poison. By virtue of an amendment to the law, the chemist at the Agricultural Station was relieved of this duty, because it was complained that such work was more than the employeés of the department had time to do seeing the great burden that the analysis of fertilizers and the care of the farmer's interests imposed on them. The life of the prisoner is at stake, for he is accused of murder, and upon the work of the chemical expert the whole trial must turn.

Is it right that any one, however humble or poor, should have his life endangered in cases like this by the false economy of County Commissioners? Is it not a plain duty of the State to provide for the proper aid being extended to both persons indicted and under trial for murder by poisoning, and to the officers of the law and the jury, who are the ones to set out the facts, and the other to determine the guilt or innocence of the accused?

What a fearful responsibility was assumed by the county officials when they employed a man to undertake the difficult and delicate task of such an analysis, who was willing to go on the stand and under oath say that he had found in that stomach 4 grains of strychnine, 16 grains of arsenic and a large quantity of oxalic acid—and all this without any dialytic separation, any special method for the parting of the organic from the chemical substances said to be present, or the use of any chemical reagents or substances that acetic and nitric acids and sodium bicarbonate!

He could not describe Marsh's test for the detection of arsenic. He did not know the first principle of dialytic work, and he could not tell the steps of his work or the methods pursued, nor exhibit to the court and jury a single evidence that he did the work which he claimed he had.

It is time that provision was made, and that definite and certain, to protect the lives of the people from such pretences at justice.

It is hard for medical students to realize that they cannot understand hygiene, forensic medicine, pharmacology and toxicology without a rigorous drill in chemistry; that they must know physics to understand the diagnostic and therapeutic use of electricity, ophthalmology, otology, the mechanism of the bones, muscles, circulation, etc.; that zoology is needed to teach sound philosophic thought, generic facts about the laws of life, health, reproduction and disease. These, and sometimes also sciences like mineralogy, anthropology and psychology, are required in Europe, with much more rigor than is common with us, of every medical student. Thus doctors, like technologists, cannot know too much pure science. An eminent medical practitioner in Europe compares young physicians who slight the basal sciences of their profession and pass on to the clinical, therapeutical and practical part, to young men who grow prematurely old and sterile.—*Dr. J. Stanley Hall, in Journal of the American Medical Association.*

Quinsy.—In the early stages of quinsy chloral hydrate is nearly a specific, thre or four grains to the ounce of glycerine being used as a gargle. It is locally antiseptic, astringent and sedative.—*Medical Record.*

REVIEWS AND BOOK NOTICES.

OUTLINES OF THE CLINICAL CHEMISTRY OF THE URINE. By C. A. MacMunn, M.A., M.D., (Dub.) Sixty-four Wood-cuts and Plate of Spectra. Philadelphia: P. Blakiston, Son & Co., 1012 Walnut St., 1889.

In no department of chemistry are we as physicians so much interested as in that of urinalysis, and it is the one branch of chemistry for which we cannot be excused for not keeping ourselves *au courant.* Diagnosis and prognosis sometimes depend solely upon it, and many times we need its aid in confirming opinions or clearing up doubts, and we must have it at our finger's end for the insurance companies.

The embarrassment is in selecting from so many good monographs one that will serve as a laboratory guide, leading us on, through the most approved methods, to results that will be accepted as authentic. We can say that we are greatly pleased with these "Outlines," presenting, as it does to us, the most recent knowledge of urinary chemistry, which otherwise would require the searching of many volumes and many medical journals in foreign tongues.

The physiology of the kidney is very well described, the illustrations being of the very best, and this is followed by a very complete account of normal urine, an admirable and most necessary preparation for a complete view of a deviation from the standard. Many pages are devoted to the consideration of urea and uric acid, reducing the difficulties of urinary chemistry of these compounds to simple processes, which can be repeated by even a chemist of no special skill, but even for the special chemist there is a full resumé of current knowledge.

In the second part is considered the pathological or abnormal conditions of urine, beginning with albuminuria. The qualitative and quantitative tests given are sufficient to provide against all possible error, clearing up many of the uncertainties which occasionally confront us.

The author very wisely gives a list of the reagents and apparatus necessary, and valuable aid in the outfitting for clinical purposes upon an economical scale.

We have not attempted to say anything about this volume from the standpoint of a chemist, only considering its application to the needs of the physician, and in this view it is such a book as every advanced medical man who is a student cannot do better than possess.

A TREATISE ON MATERIA MEDICA, PHARMACOLOGY AND THERAPEUTICS. By John V. Shoemaker, A.M., M.D., and John Aulde, M.D. Vol. I. Philadelphia and London: F. A. Davis, 1889.

This work, in its first volume, is "devoted to pharmacy, general pharmacology and therapeutics, and remedial agents not properly classed with drugs." It would very likely be a misjudgment to record impressions of a work before it is completed, and we will be content in saying that the production of this volume is well arranged for study and reference, the letter press being of excellent quality, and the catch titles and words, enabling one to get over a large amount of printed space rapidly, and serving also to guide one to particular passages. The design of the book is for the student of the elementary principles, and at similar intervals are blank pages for the record of notes.

The authors will "postpone the issue of the second volume until such time as would permit them to go over the entire ground in the special department of drugs." After this part of their task is done, we will be able to say what relation the volume bears to its contemporaries.

ESSENTIALS OF PATHOLOGY AND MORBID ANATOMY. By C. E. Armand Semple. With 46 illustrations. Philadelphia: W. B. Saunders, 913 Walnut St., 1890.

This is *Saunders' Question Compend No.* 6, and is an excellent example of a student's help in preparing for examinations. It is customary for medical editors to inveigh against the use of books of this class, but when the average of this learned profession will pass an hour in silent colloquy with one like this. he must honestly confess that the subject is one that he is likely to allow to be side-tracked in these busy days of practical things.

Notwithstanding that the letter press and cuts have a worn and cheap appearance, the teaching quality of the book is very good, and we can commend it to our student friends.

PHYSICIAN'S LEISURE HOUR SERIES. (1) Diabetes, by A. H. Smith, M.D. (2) Nervous Syphilis, by H. C. Wood, M.D. (3) Education and Culture as Correlated to Health and Diseases of Women, by Alexander J. C. Skene, M.D.

The publishers of this handy series have shown good judgment in the selection of monographs, giving some original essays and reprinting others which had already attained to a good degree of favor. The essay on Diabetes gives a good practical account of the disease for the use of those who have to treat it, leaving out discussion of unsettled points. It is brief, pretends to nothing, but is a collection of the best that is already established.

The essay by Prof. Wood is already known to the public, and credit is due to him of having given some of the earliest clearly defined clinical portraitures of syphilis of the nervous system.

Dr. Skene's essay covers the ground so often attempted in addresses before sanitary societies and elsewhere, on the moral and physical nature of our women, pointing out errors and abuses, analyzing some of the peculiarities of our American life, and helping his readers to reflect, and so in this sense is an educational number of no mean importance. It is a pity that we can read such essays, acknowledge that we are guilty according to the terms of the indictment, and look at each other despairingly, as though by some fatality we were bound to pursue the erroneous steps which promote the deterioration of our children's health. After all, we think those parents have begun right who have faithfully taught their daughters self-control—self-denial—for upon such a basis it is marvellous what can be built.

WOOD'S MEDICAL AND SURGICAL MONOGRAPHS.

The number for December contains five essays: "A Practical Treatise on Baldness," by Dr. George T. Jackson, M.D.; "The Sphere, Rights and Obligations of Medical Experts," by James T. O'Dea, M.D.; "Pathology and Treatment of Ringworm," by Geo. Thin, M.D,; "Notes on Dental Surgery," by T. Smith, M.D., LL.D.; "On Sounding for Gall-Stones and the Extension of Gall-Stones by Digital Examination," by Dr. Geo. Harley.

In the above list there are one or two good essays, and the wants of a large number of readers are supplied by the variety afforded by the publishers.

DISEASES OF THE EYE. A Practical Treatise for Students of Ophthalmology. By George A. Berry, M. B., F. R. C. S. Ed., Ophthalmic Surgeon, Edinburgh, Royal Infirmary; Lecturer on Ophthalmology, Royal College of Surgeons, Edinburgh. Lea Bros. & Co., Philadelphia, 1889.

This recent contribution to the literature of ophthalmology fills a place evidently waiting for it, viz: a practical English work on diseases of the eye which can be referred to by the busy practitioner with a certainty of finding therein the latest views on pathology and treatment of the different affections of the eye.

The practical nature of the work is still further enhanced by the beautiful and life-like illustrations given throughout the work, the production of which is an unusual feature in manuals of ophthalmology. The tints are closely approximated to those seen in actual disease of the eye, and there is no doubt that the representations given of diseases of the conjunctiva, cornea, iris, etc., will be a positive aid in diagnosis to many an amateur ophthalmologist. The plates are produced from drawings of actual disease by Dr. J. Tatham Thompson, of Cardiff, and deserve the highest praise for the manner in which they have been executed.

The work is divided into three sections and seventeen chapters beginning with the appendages of the eye and ending with a description of the different operations performed on that organ and its contiguous parts.

The work is original, apart from the common fund of information which is the stock of no particular author, and few references are made directly to other authorities. Diseases of the eyelids, conjunctiva, cornea, lens, ciliary body, choroid vitreous, retina and optic nerve are fully described. The chapter on glaucoma is very interesting, and under the head of etiology the following opinion is worthy of attention.: "As has already been remarked, however, changes found in glaucomatous eyes can rarely with any certainty be looked upon as primary and in some way connected with the outbreak of the symptoms of glaucoma, and not rather secondary, or resulting from the prolonged inflammatory or atrophic changes met with in the disease. But if direct anatomical evidence is difficult to obtain there are many clinical reasons for assuming that a stasis takes place in the circulation within the eye. Thus the greater tendency to disease the older the individual, its occurrence along with diseases of atheromatous degeneration elsewhere, and the tendency that there is for an outbreak to take place after debilitating diseases, mental depression and other circumstances giving rise to a slowing of the heart's action are all suggestive of this. So also are the actions of iridectomy and the subsequent atrophic changes seen in the iris."

Anomalies of vision, intraocular tumors and diseases of the orbit are described and included in the latter is a description of Graves' disease.

Section second is devoted to errors of refraction and accommodation, affections of the oculo-motor muscle and examination of the eye; and herein the lover of optical mathematics may revel to his heart's content.

Section third describes the operations on the eye and its appendages. The grouping of the operations, apart from the description of the disease, may be an objectionable feature to some, as there are many readers who prefer to find a description of the remedial measure, even if it be a surgical one, included under the general heading of treatment.

The publishers' part of the work has been well done, and there is no doubt that this book will rank high in the list of recent contributions to the science of ophthalmology.

CURRENT LITERATURE.

THE NON-TUBERCULAR AND NON-CARDIAC HÆMOPTYSES OF ELDERLY PERSONS.

At a recent meeting of the medical Society of London, Sir Andrew Clark read a paper with the above title, in which he described a form of pulmonary hemorrhage occurring in persons somewhat past middle age, and which is not associated with any tuberculous or cardiac affection. His attention was first called to this condition many years ago by the occurence of a fatal case of hæmoptysis in a man between fifty and sixty years of age, who had been admitted to the London Hospital for treatment of a subacute bronchitis. The patient had for several years been the subject of a moderate progressive osteo-arthritis, and for the past four or five winters had suffered from severe bronchitis. It was during one of the latter attacks that he was admitted to the hospital. About two weeks after admission he began to cough up small quantities of blood at short intervals. In spite of rest, restricted diet, application of ice to the chest, and the liberal use of astringents, the bleeding persisted, and within a week the patient died. At the autopsy the heart was found to be normal, and no evidence of tuberculous disease could be detected anywhere. Within the lungs were seen several isolated patches of emphysema surrounded by hemorrhagic extravasations. Examination under the microscope showed that the seat of the hemorrhage was in the immediate neighborhood of these emphysematous patches, and that the minute arteries in these localities were always diseased, the structural changes were being limited to nuclear proiiferation in the middle coat, and an amorphous and hyaline infiltration of it and of the intima. The first change, the author believed, occurred in a terminal branch of the pulmonary or bronchial artery, and this resulted in obstruction of the blood-supply throughout a certain territory. Following this was degeneration of the capillaries and venous radicles, determining a true atrophic emphysema, and, the integrity of the vessels being thus impaired, the formation of thrombi or recurrent conditious of pressure brought about the fatal hemorrhage.

Subsequent to this observation Sir Andrew met with quite a number of similar cases, in all of which the usual treatment by astringents was without effect. Finally he determined to try another method of treatment. In a case which he saw in consultation, after having instituted the ordinary treatment without obtaining an arrest of the hemorrhage, he put the patient upon a light and rather dry diet, gave a dose of calomel at night followed by a saline cathartic in the morning, and ordered an alkaline mixture containing ammonia. This was entirely successful, the bleeding ceased within thirty-six hours, and the patient recovered perfectly.

The following are the author's conclusions in regard to this form of pulmonary hemorrhage :

1. There occurs in elderly persons free from ordinary diseases of

the heart and lungs a form of hæmoptysis arising out of minute structural alterations in the terminal blood-vessels of the lung.

2. These vascular alterations occur in persons of the arthritic diathesis, resemble the vascular alterations found in osteo-arthritic articulations. and are of themselves of an arthritic nature.

3. Although sometimes leading to a fatal issue, this variety of hæmoptysis usually subsides without the supervention of any coarse anatomical lesion of the heart or of the lungs.

4. When present, this variety of hemorrhage is aggravated or maintained by the frequent administration of large doses of strong astringents, by the application of ice-bags to the chest, and by an unrestricted indulgence in liquids to allay the thirst which the astringents create.

5. The treatment which appears at present to be the most successful in this variety of hæmoptysis consists in diet and quiet, in the restricted use of liquids and the stilling of cough; in calomel and salines; in the use of alkalies with iodide of potassium; and in frequently renewed counter-irritation.—*Medical Record.*

THE NECESSITY OF PROLONGED REST AFTER SOME ATTACKS OF DIPHTHERIA.

By Charles Warrington Earle, D. D., Chicago.

It is probable that a large number of sudden and unexpected deaths take place after diphtheria than follows any other disease. And yet we are acquainted with medical men who do not believe it worth the while to isolate those sick with this malady, and think responsibility ceases when the white spots commence to disappear in the throat. The following is a hypothetical case, but is there a gentleman present who has not seen one or more which corresponds with it?

A. B. C., aged six years, was taken with a mild attack of diphtheria, which yielded easily to treatment in five days. The spots on the tonsils had nearly disappeared, and I discontinued my visits. Ten days after, I was hastily summoned, and, upon my arrival, found the child dead. The parents informed me that the little one had made an excellent recovery from the diphtheria, and, although somewhat weak and easily tired, had been playing around the house. "A short time before we summoned you we noticed that the little one was quite pale, and complained of a little pain around the heart. She perspired freely, however, and we thought nothing of the pallor; but her limbs began to get blue and her breath short, and so we sent for you."

Death certificate read apoplexy or heart-disease.

Not all cases are as pronounced and sudden as the one narrated; but death comes. Sometimes we have premonitory symptoms, if we will note them, and if we will take any sort of notice, death may be averted in some cases. I have recently ordered a young woman to maintain the horizontal position for ten weeks, and during some of this time her heart was so irregular and weak that its pulsations could not be counted. I saw a case recently in consultation with my colleague, Professor Quine, simply to add my testimony to his, that the only safety to a young girl who had passed through a mild diphtheria was in bed. Her heart was slow and weak, and the extremities were a little subnormal as regards temperature. The people were amazed when I told them that the child should be kept in bed for at least four weeks, and possibly a longer period.

Two months ago I saw a case, in consultation, in one of our suburban towns (we have no suburbs now,—we have taken them all in). An adult had only a moderate pharyngeal diphtheria, but his lungs were involved, probably a catarrhal pneumonia (secondary). He was very weak, but his recovery could be looked for, although a long time must elapse before he could resume work as a bank clerk. His attending physician had given him excellent advice, but everybody was clamoring for a speedy cure. It is sometimes very difficult to make the people understand the necessity of carrying out details, particularly those which the profession have not grasped and fully realized. Notwithstanding that this young man was kept in a lying posstion,—fed with food whose assimilation wus made as easy as possible,—nourished by rectum and under his skin,—life maintained the general, cerebral, and cardiac tonics and diffusible stimulants,—notwithstanding all this, he died.

I cannot undertake to discuss the pathology of these cases. It was not my intention, even if I fully understood it. What I desired to do was to call attention to these cases, and to obtain the endorsement—the influence— of this Society, so that we can go before the great general profession and say that these cases need more than a goose-quill and sulphur treatment.

Personally, it seems to me that it is a muscular failure. We all notice the rapid and terrible emaciation in these cases—the general muscular failure and weakness. The heart as a muscle, in my judgment, suffers in like manner. Whether there is a fatty degeneration I do not know, but the heart cannot work. We have in most cases symptoms which point to some form of paralysis. It may be in the throat, the soft palate, or an unusual muscular weakness. It may be in a very slow or a very rapid pulse, or in irregularities.

We should not neglect it. It means more than we have been accustomed to acknowledge,—at least more than the majority of the profession seem to acknowledge. In some families, where they are willing to go to the trouble, I am in the habit of keeping all diphtheritic patients in bed two or three weeks after all symptoms subside.

This may not be necessary, but it is safe. It is absolutely demanded, however, where symptoms of paralysis are prssent, and should be insisted upon till every sign denoting it has disappeared.

No definite time can be named when this precaution should cease. It may be four weeks, and it may be four months; and in a case to which I refer in another paper, it was one year, and demanded not only ordinary care and treatment but life in the country.

The indications for treatment in these cases are from first to last the recumbent posture,—not to be relinquished for any purpose; the best and most nutritious diet introduced in every possible manner; the nerve tonics—strychnia and nux vomica and electricity—associated with general tonics and stimulants; but placed before everything else and insisted upon is the recumbent position.—*Archives of Pediatrics.*

PRACTICAL POINTS IN THE TREATMENT OF SYPHILIS.

In an interesting article on the above subject in *Medical News*, R. W. Taylŏr, M. D., says that "since the adoption of the long mercurial courses, an easy-going, happy-go-lucky feeling has taken hold of many physicians in their treatment of syphilis, and he is probably right in his belief. The teaching that syphilis can be cured, but that a treatment of two or three years is necessary, has engendered a feeling of false confidence and a tendency to superficial routine. It is true that syphilis can be cured, but constant care and watchfulness are necessary; mercury should be pushed, but still kept well in hand, so as to get all the benefit, and avoid all drawbacks and harm from its use.

Syphilis cannot be aborted thoroughly in its primary stage, whether by excision or the chancre and neighboring glands, by cauterization, or by early mercurial treatment either per os or hypodermatically, as suggested by Bronson. Treatment should not be begun until the secondary stage. Of the three methods of treating syphilis, the expectant, or symptomatic, is unscientific and dangerous. The continuous, or tonic treatment, induces a condition of tolerance to mercury, and may not only have no effect upon existing lesions, but this tolerance may be lasting benefit from the rational use of mercury in the future.

The treatment by interrupted courses is the most preferable, and the most practicable and satisfactory to both physician and patient, and promises a cure almost positively to a patient in ordinary health who will systematically submit to it.

The best preparations of mercury for administration by the mouth are the protoiodide, in 1-5 to ½ grain pills or tablets three, four or five times a day, according to the kind of patient and the behavior of the symptoms, and the tannate (hydrarg. tannic-oxydal) in ½ to 1 grain doses. The early mercurial course should be active and should last at least three months, and if possible four or five months. In most cases, at the end of three months, the patient's condition will be found to be so reassuring that a stoppage of the dose may be allowed for one to three weeks. The next course may last but two or two and a half months followed by four weeks' intermission. Then the medicine may be used again in the same manner. During the second year the iodide of potassium may be combined with the mercurial salt, using either the bichloride or the biniodide. During this second year, all things being favorable, the intervals may be lengthened, though a full dose of the combined drugs should be given when treatment is being followed. The morale of the patient is always much improved by these periods of liberty. Syphilis in private practice is different from that of dispensary and hospital practice, in that perfect cures are obtainable, while in the latter we really practice a series of patchings-up, as we may say.

All syphilitic lesions, even the most minute, are to be feared as possible resources of continuous or intermittent reinfection of the system. When lesions have become a little old, mercury by the mouth does not invariably act radically upon them, and we gain by bringing the remedy into more intimate local contact with these infecting foci. It is a valuable rule never to be content with the action of mercurial pills, unless we see a decidedly rapid subsidence of the lymphatic ganglia. Mercurial inunctions, though largely used abroad as routine treatment, as to be preferred as adjuvants and emergency resources, and the same is true of hypodermatic injections and fumigations. The early rashes of syphilis, both active and chronic, are best treated by inunctions. When the eruption has disappeared the pills are resumed again and the ointment discontinued. Unusually large infiltrated syphilitic ganglia, wherever situated, are signs of evil omen, and as a general rule may be said to acquire active regional treatment. Well-ordered, carefully applied local treatment is efficacious in syphilitic neuralgias in general, in syphilitic eye troubles, and in appropriate cases of meningeal and cerebral disease, applied with precautions upon the neck and under the jaws, and even upon the temple and occiput. When mercury is being rubbed into the neck we should carefully watch the mouth and gums.

Many cases of the ecthymaform, the rupial, and the superficial serpiginous syphilides, are due to the invasion of microbes. In cases with much pustulation and encrustation the common antiseptic remedies are better, certainly for a time, than mercurial inunctions, which will prove beneficial for the resulting thickenings of the skin.

The initial nodule should be treated antiseptically, and covered with mercurial ointment or calomel. Mucous patches and condylomata should be cleansed and dusted with calomel.

Hypodermatic injections have many advantages and disadvantages, but are useful at certain times. The best preparation is an aqueous solution of the bichloride, $\frac{1}{8}$ to $\frac{1}{2}$ grain in 10 drops of water. Where rapidity of action is necessary, as in lesions on exposed parts, they may be used with care witnout causing trouble, even on delicate parts. The injections may be made very close to the eruptions. They may also be employed in certain rare cases, where mercury by the stomach acts as a depressant, and nutrition is much impaired. Here small but rapidly increasing doses should be used. Osseous, bursal, fascial and articular lesions are much benefited by injections combined with potassium iodide internally, but the efficacy of inunctions in these cases must be forgotten. In conclusion, mercurial fumigations are of great value, and most useful in stubborn localized and even general eruptions, and particularly in the chronic, scaly stages of early and late eruptions, and also in almost all cases of pustular, ulcerative, and serpiginous syphilides. They must be used with caution, and the patient should be carefully watched during their use.—*Weekly Medical Review.*

INFLUENZA.

(From Dr. David Ramsay's Historical Works.)

This disease is ancient and honorable, if not agreeable. Dr. David Ramsay, the eminent historian and physician of South Carolina, has had something to say about it in his historical works, which at this time may not prove uninteresting, since it concerns the people of this State. If it attacks Charleston this year, it will not be the first time in her history, as seen in the following from Dr. Ramsay's history:

"Influenza, though a serious and frequent epidemic, has seldom been the subject of record.

"Many persons remember that the influenza, after traversing the United States in 1789, reached Carolina and spread extensively. It was very fatal on the plantations near the Northeastern line of the State, especially to prime, full-grown negroes. William Alston lost about thirty-five of that description. The whole mucous membrane, through all its recesses on the insinuses of the asfrontis, was most grievously affected. Deafness, loss of taste and smell for a long period were among its consequences. More have reason to remember the influenza of 1807. Gradually advancing over the Northern States, it reached Charleston early in September.

"It spared neither age nor sex, though children often escaped altogether; or, if attacked, got through with the disease with the least inconvenience. The reverse was the case with aged persons. It soon became so general that in some large families there was not a sufficiency of persons in health to attend on the sick. In a few weeks it is supposed that 14,000 persons, or half the population of Charleston, had been afflicted with the disease. Of these, forty-five died, thirteen of whom were white persons and thirty-two negroes. The former were generally aged persons. The disease spread on all sides into the country. The mortality in Georgetown and Beaufort was considerably greater than in Charleston. The disease in many cases was so mild as to preclude the necessity of application to a physician. In dangerous cases, when medical aid was required, bleeding, blistering, emetics, cathartics, and sudorifics were chiefly relied upon.

"The influenza in its commencement resembled the yellow fever with a pain in and over the eyes, and with red streaks over their whites. A sharp acid scum was discharged from the eyes, and sometimes from the nostrils. In such cases a hoarseness and soreness of the throat was usual. The sense of smelling was sometimes impaired, the hearing was frequently injured, and in a few cases the powers of vision were diminished. A tightness and a stricture across the breast with a dry cough, was common. The whole mucous membrane lining the fauces, nostrils and bronchia was uncommonly stuffed with phlegm. In the aged the disease assumed the form of a pneumony; in the young and the plethoric, that of a pleurisy. Persons who of a consumptic diathesis, or who had been subject to old coughs or diseases of the breast, suffered most and oftenest relapsed. Spittings of blood and other precursors of consumption attacked such patients after the disease had in their cases apparently vanished and generally disappeared. An uncommon increase of consumption followed in the year 1808, which exceeded anything ever before known in Charleston."—*World.*

THE HOUR AT WHICH DEATH MOST USUALLY OCCURS.

By John Francis Burns, M. D., Senior Assistant, Charity Hospital House Staff, New York.

A very general opinion is entertained by medical practitioners and others engaged in caring for the sick that the greatest number of deaths occurring in individuals afflicted with disease takes place during the hours immediately succeeding midnight and preceding the dawn. This opinion most probably originates in part from imperfect observation and partly from a misapplication of the physiological law governing the lowest period of vitality in the healthy individual. The rule is said to be particularly true in those suffering from chronic exhausting diseases, and deductions have been drawn from these impressions which have served to regulate the administration of stimulants in such cases, it being said, "if six ounces of whisky be needed in twenty-four hours, four should be administered from 2 to 6 a. m., for then is vitality in the human being at the lowest," and "more deaths occur at these hours than at any other period." Such expressions may be found scattered through works on materia medica and therapeutics, and in many of the text-books on the practice of medicine. The idea finds expression also in the lectures of teachers in our colleges, and usually leaves a well-grounded impression on the mind of the medical student, which is apt to remain a permanent one. I accepted this teaching at college because I had neither the means nor the time to verify or disprove it to my own satisfaction. Yet I always doubted the correctness of the conclusions drawn, and, to settle the doubt in my mind, since entering on my duties at the hospital, I have collected the statistics given below, which I find do not agree with this generally accepted idea. Thinking that they may interest others and that the small mistakes in a subject are sometimes, and to certain people, as important as the greater, I present them. The statistics are taken from the records of the Charity Hospital on the one hand, and from the books of the New York Board of Health on the other. The former are mainly of deaths occurring in those afflicted with chronic exhausting diseases; the latter, in those dying from the acute exanthemata. The former represents all the deaths at the hospital for a period of nearly ten years, irrespective of sex, age, disease, or condition; the latter, all the deaths occurring in the city and county of New York from the acute contagious diseases. At the hospital the records of death are kept with great care, and I am sure can be taken as a fair test. I have no doubt that the health authorities' records are also accurate, but they are the result of individual reporters, so that they are not so reliable as those of the hospitals. There are many circumstances that should greatly tend

The Truth About Pepsin.

THE competition among pepsin manufacturers for the past year has been so great as to lead to not a little misrepresentation by the less scrupulous as to the actual facts. The controversy over the subject of pepsin tests and standards and comparative digestive power has gradu-lly simmered down to a recognition of certain fccts which all physicians should now recognize. These may be briefly stated as follows:

Since the last revision of the U. S. Pharmacopœia there has not been a single instance where the remedial value of a preparation has been so greatly enhanced, through the instrumen-ality of the manufacturing pharmacist as in the case of pepsin.

This achievement has resulted from the elaborate researches which have been conducted n the department of our laboratory devoted to original work. We have thus been enabled o increase the proteolytic or digestive power of commercial pepsin to a standard forty times higher than that required by our Pharmacopœia, and, at the same time, imparted to our product ertain qualities which have been heretofore regarded as verging on the impossible.

Our products are to be distinguished from the so-called "insoluble" pepsins by their roperty of readily dissolving in water. This fact alone is an evidence that certain insoluble matter with which pepsin is ordinarily contaminated has been rejected by our process of manufacture. The contamination here referred to is dried mucus, which possesses no proteolytic power whatsoever, while its presence serves to render the product exceedingly unstable.

Another class of pepsins includes certain soluble forms of the ferment, but these products re invariably of an exceedingly hygroscopic nature and are very prone to deterioration, finally esulting in a total loss of proteolytic power. Aside from the loss in peptic power, the putrescible haracter of the contaminations above enumerated gives rise to certain products of decomposition, usually evidenced by the pronounced and disagreeable odor, suggestive of incipient utrefaction. This already-existing tendency may favor further changes when a product of ich highly complex nature is exposed to influences of warmth, moisture, and other conditions nseparable from the alimentary canal, and leucomaines or ptomaines of a nature harmful to he human subject may be developed. It is therefore evident that pepsin should be free from ny obnoxious odor, and that such a product should alone be prescribed by the physician.

Our pepsinum purum in lamellis and pepsinum purum pulvis meet all the requirements a typical preparation, not only as regards their freedom from toxic substances, but in point digestive activity as well. Both are capable of dissolving two thousand times their weight coagulated egg albumen under the conditions of our published test, but should the experience physicians indicate that a still greater activity is desirable, we are prepared to meet their wants this direction, as a degree of activity has already been reached by us which is many times that our present standard.

We supply pepsin in the follwing forms:

Pepsinum Purum in Lamellis; Pepsinum Purum Pulvis; Pepsin, Saccharated, U.S.P., 80; Pepsin, Glycerole, Concentrated; Pepsin, Lactated; Pepsin, Liquid, U.S.P., 1880; epsinum Purum Tablets, 1 gr., Sugar-Coated.

All information desired by physicians as to our pepsin products, our general line of standard edicinal preparations, pharmaceutical specialties, and latest therapeutic novelties and improve-ents in methods of medication, will be promptly furnished on request.

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SUCCUS ALTERANS is a purely vegetable compound of the preserved juices of Stillingia Sylvatica, Lappa Minor, Phytolacca Decandra, Smilax Sarsaparilia and Xanthoxylum Carolinianum, as collected by DR. GEO. W. McDADE exclusively for ELI LILLY & Co., and endorsed by DR. J. MARION SIMS.

SUCCUS ALTERANS continues to gain favor from its remarkable Alterative and Tonic properties, *eliminating specific poison from the blood* and *increasing the proportion of red corpuscles in anœmic patients* to a wonderful degree; is endorsed by the medical profession and in use by many hospitals of note.

SUCCUS ALTERANS in venereal and cutaneous diseases is fast supplanting Mercury, the Iodides and Arsenic; and is a certain remedy for Mercurialization, Iodism and the dreadful effects often following the use of Arsenic in skin diseases.

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to increase the death-rate at night in a large public hospital, principal among which is the great vitiation of the atmosphere during this period. During the night all the patients are confined to the ward, and ventilation is apt to be neglected. This must certainly have a very depressing effect upon those suffering with pulmonary affections, and on those in whom disease has effected extensive alterations in the physical and chemical characters of the blood. This alone should greatly tend to increase the number of deaths at night, and, if there was any truth in the accepted notion, the records should show quite a preponderance of deaths happening at night. The contrary is, however, the rule, the figures showing 27 cases fewer during the hours from 6 p. m. to 6 a. m. than for the corresponding twelve hours of the day. Again, from 2 to 6 p. m. there were 66 more deaths than from 2 to 6 a. m. The total number of deaths in the list of acute diseases for the twelve hours from 6 p. m. to 6 a. m. is 169 less than for the corresponding period during the day. The hours from 2 to 6 a. m. in this list show 53 more cases than for the corresponding period in the afternoon; this in nearly 4,000 cases is very slight. It the chronic cases the greatest number of deaths at any hour was at 4 p. m., with 2 and 5 p. m. and 6 a. m. close following. The greatest in the acute list at 3 a. m., with 11 a. m. and p. m. close following. The lowest number in the acute list at 12 m. (midnight), that hour so dreaded in the sick-room by attendants, and to which a great deal of superstition attaches. It is noticeable that the number for this hour is exceedingly low—about half of the average number. In the chronic diseases the lowest number appears at 9 a. m. In the chronic cases the number dying from 9 a. m. to 12 m. (noon) seems relatively low compared with the same period in the acute list. I have used all the figures available at the hospital, and I only stopped when the death books available were exhausted. I only sought the health board's statistics for the purpose of comparison, and, as the figures run up quickly, I thought two records would serve as well as a longer period. In making the collections I noticed that the figures did not vary essentially throughout. There was always a preponderance of deaths in favor of the hours of the day, while the additional hours would vary by comparison at different periods.

Deaths occurring at Charity Hospital, Blackwell's Island, during the past ten years, by hours.

6 A. M. to 6 P. M.		P. M to 6 A. M.	
6 A. M	205	6 P. M	187
7 “	178	7 “	187
8 “	180	8 “	181
9 “	138	9 “	197
10 “	165	10 “	165
11 “	169	11 “	172
12 noon	175	12 midnight	165
1 P. M	178	1 A. E	173
2 “	204	2 “	175
3 “	191	3 “	181
4 “	209	4 “	194
5 “	206	5 “	194
Total	2,198	Total	2,171

Difference in favor of the hours of the day, 27.

Deaths occurring in the foregoing table from 2 to 6 a. m., and 2 to 6 p. m.

2 to 6 A. M.		2 to 6 P. M.	
2 A. M	175	2 P. M	204
3 “	181	3 “	191
4 “	194	4 “	209
5 “	194	5 “	206
Total	744	Total	810

Difference in favor of afternoon hours, 66.

Deaths from the acute contagious diseases for two years, reported to the New York Board of Health, by hours.

6 A. M. to 6 P. M.		6 P. M. to 6 A. M.	
6 A. M	464	6 P. M	474
7 “	386	7 “	430
8 “	420	8 “	369
9 “	434	9 “	411
10 “	450	10 “	420
11 “	512	11 “	502
12 noon	448	12 midnight	243
1 P. M	436	1 A. M	479
2 “	428	2 “	434
3 “	436	3 “	506
4 “	493	4 “	499
5 “	482	5 “	453
Total	5,389	Total	5,220

Difference in favor of the hours of the day, 169.

Deaths occurring in the following list from 2 to 6 a. m. and 2 to 6 p. m.

2 to 6 A. M.		2 to 6 P. M.	
2 A. M	434	2 P. M	428
3 "	506	3 "	436
4 "	499	4 "	493
5 "	453	5 "	482
Total	1,892	Total	1,839

Difference in favor of early morning hours.

From these 15,000 cases, extending over a period of twelve years, it would appear that death occurs seemingly without any particular predilection for any certain hour and that the number of deaths for each hour is very evenly proportioned considering the large number of cases taken and the time covered. The only very positive conclusions I have formed from the figures are: 1. That the idea that more deaths take place in the early morning hours is an erroneous one. 2. If stimulants are to be pushed in disease during these hours, the practice must be justified upon some other ground than to avert the possibility of danger supposed to be very probable at this period. 3. That the vitality of an individual in disease is not regulated by the same influences or subject to the same laws that govern the vitality of a healthy human being, the normal equilibrium maintained in health between the mental and physical states being altered.—*New York Medical Journal.*

[Notwithstanding this array of figures, we think the evidence of individual experience should be carefully weighed, and we would like to hear what others have to say.—Eds. N. C. M. J.]

PUTTING NEW WINE INTO OLD BOTTLES.—Dr. Theodor Clemens, writing in the *Allgemeine medicinische Central-Zeitung*, proposes thhe injection of the freshly passed urine of a child into the bladder for the cure of chronic cystitis in aged persons. The bladder is first thoroughly washed out, and then filled with urine which has just been passed by a healthy child. He claims to have obtained excellent results with this novel therapeutic tonic.—*Medical Record.*

EDITORIAL CORRESPONDENCE.

NC Med J. (o.s.) 25: 48-52, #1, Jan 1890.

The Johns Hopkins Hospital—The Presbyterian Eye and Ear Infirmary—The Library of the Surgeon General's Office and the Army Medical Museum.

The great attraction which Baltimore now affords to strangers is the Johns Hopkins Hospital. One can hardly be seated in the corridor of the hotels an hour before he hears the mention of this Institution, or of the great University founded by the munificence of the same benefactor. It is in the former establishment that we are just now interested. It is located in East Baltimore, accessible by several lines of street cars from the hotels, the "pumpkin pie" line (locally so named because of its peculiar shade of yellow) is the most convenient from the Carrolton, making a trip every twelve minutes. Reaching Broadway, the grand group of buildings bursts upon you with pleasing effect, and here, bounded by four streets, including a large square, are the many buildings of the Hospital, entirely separated, and connected by long corridors, heated and lighted—so comfortably, that one may leave his overcoat and hat in the front hall, and not feel the need of them in his long journey through the various galleries and wards, the only exception being that the pathological laboratory and the isolated ward are disconnected.

The central executive and residential building is architecturally beautiful, and the rotunda, with its stories of galleries from which are reached the officers' quarters, is airy and handsome; but apart from this and the two buildings which flank it right and left, the male and female pay wards, the buildings are massive and plain. All thought of architectural beauty is forgotten by the visitor in the interest he at once takes in the heating, ventilation, lighting and general fitness of arrangements, for this must be considered the model hospital of the world.

If we understand the design of the projectors of this establishment, it was not to erect an immense building for the accommodation of the many, but to make a structure so complete in all its appointments that it would represent the high water mark of sanitary science and practice, affording each individual the best possible surroundings. The critic, in looking at the empty basements, would inquire, Why all this waste? The constructors reply by making these great chambers fresh air inlets and room for the hot air and steam piping. A casual examination of so great a combination in construction is unsatisfactory, and an account of it after a short stay in the Hospital would not give a fair idea. To state that there are sixty miles of piping for the warming of the establishment, that water heated to 140° after traversing this great length sustained something like a decrease of 10° in its circuit, some idea is obtained of the perfection of the plan.

Of the general management of Johns Hopkins Hospital we can speak in terms of entire satisfaction. The machinery of this large community, under the skilful hand and eye of Dr. H. M. Hurd, works as smoothly and as harmoniously as though it had been an ancient establishment wound up to run a term of years. Dr. Hurd was formerly Superintendent of the large Michigan Asylum for the Insane at Pontiac, where he had under his care more patients than will probably ever come under his management here, and the task to him seems like an easy one.

Of the Hospital Staff, one is struck with the earnestness of the young blood which composes it. With such clear-headed teachers as Dr. Osler, of the Hutchinson order of intellect—always thoughtful, always practical, ready to communicate, ready to receive, surrounded by an atmosphere of congenial work and superior workmen, building with forethought and of necessity doing the thing nearest to hand with fidelity and thoroughness, the mission of this great Institution as a higher school of medicine can be safely trusted. Dr. Welch and Dr. Councilman, of the pathological department, are assiduous workers, and it is fortunate that America can afford to men of such high attainments a field adequate for the expansion of their abilities. Dr. Welch reminds one of the sweet-tempered DeRosset, and wins all who come into the atmosphere of his laboratory by his courteous ways.

The surgical staff of the Hospital, with Dr. Halsted as the chief, is superbly equipped. The operating room is a model of adequate lighting and conveniences of every sort, the extreme idea of antiseptic management ruling it all. If it were possible to approximate a strict chemical standard of antisepsis, Dr. Halsted would reach it, and his good work shows how high a standard he has reached. It is a good thing, though, that Puck has never intruded into the antiseptic arena and sketched the ghostly attires of the reverend surgeons and the devoted nurses at their bloody duty. But caustic satire or the deft pencil of caricature can never shake the purpose of surgeons who are daily doing with uniform success operations formerly impossible.

The sensation of the hour at the Johns Hopkins was a case of *Filaria sanguinis hominis.* The patient was sent from Charleston by Dr. Dawson. The presence of chylous urine has led to the suspicion of the presence of filaria, and it was demonstrated before he left home. Many busy microscopes were watching the uneasy nematode splashing and wriggling in a sea of blood cells, dying only after a protracted struggle of many hours. It was stated that the patient contracted the disease by drinking water from the tank of an East India ship. It is not unlikely that many more cases than this will be found in the South if searched for diligently. It does not take a higher power than a ⅛th to see clearly this parasite, but care must be taken that the blood for examination is drawn at night.

Johns Hopkins laboratories is the place to see the plasmodium malariæ demonstrated from the living blood, going through its various stages to the flagellate form. Many times, as it happened to the writer, a white blood-cell invests and destroys the object before its characteristic development was completed.

We will not dwell longer on the Johns Hopkins Hospital, as nothing we could say can do more than to entice our readers to make a run over to Baltimore, and see for themselves that hardly a small portion of the truth had been told them. Here, now, in easy access of the whole South, we have a fountain from which to draw our future supplies of learning, but while we do this let us not forget to contribute of our pathological material.

Great as the Johns Hopkins Hospital is, it does not eclipse the Presbyterian Eye, Ear and Throat Hospital in this special line. Where would the American student go to see more, especially in the eye and ear diseases? Dr. Chisolm is inimitable in the various abilities he possesses, as surgeon and clinical teacher. He showed the writer the 91st and 92d cases of cataract extraction done without iridectomy, under the influence of a 3 p. c. solution of cocaine. The eye after extraction of the lens is then deluged with a solution of eserine, and closed with about 1½ inches of gelatine plaster. The results have been excellent, and will be made known probably when the hundredth of the series has been reached. This institution treated more than 8,000 patients, for 1889, and is doing unknown good in Baltimore and for all the the tributary country.

If ever you go to Baltimore stop, I pray you, and look in at the Presbyterian for a few hours! Dr. Chisholm was brilliant in general surgery, but his course as an eye specialist has been an immense blessing to suffering humanity,, and has afforded material for the instruction of many a well-equipped ophthalmologist.

The new quarters of the Army Medical Museum and Library of the Surgeon General's office is well worth an hour's ride from Baltimore to inspect. The old building, Ford's Theatre, was abandoned for this new structure about the time of the International Congress. It is located next to the National Museum. The present edifice was constructed by Congress for its special use, and is perfectly adapted in every respect. The building is somewhat in the shape of a **U**, each stem of the latter representing a wing, one of which is the library, the other the museum, and the connecting portion being devoted to offices, and workshops for microscopic work, etc., etc., while the laboratories proper are contained in a building extending out from between the stems of the **U**. One is at once struck with the large and adequately lighted hall of the library. The present alcoves do not cover more than one-half the floor of the beautiful hall, sufficient room having been reserved for the expected additions of the years to come. The American medical student can no longer do without this great and well digested collection of books. It stands ready to minister to his hungriest cravings, with every assistance from its chief. It must be a proud day for a man no older than Dr. Billings to see accomplished by the fertility of his brain and his masterly leadership, the model construction of the Johns Hopkins Hospital and the Library of the Surgeon General's office. Either one enough for any dozen men, and still this represents but a part of the work he has done and is doing as director, manager, leader, lecturer in three or four cities, besides authorship of the most voluminous nature, and, to cap the whole, has the medical census of this decade in his mental and official laboratory to cook. We, like all the visitors to the great institution over which he presides, are under lasting obligations for courtesies of the day, and helps at various times.

One never tires looking at the huge collection in the museum arranged with the special intent of teaching the observer as he stands gazing from alcove to alcove. A lancet, once the property of John Hunter, presented by Sir James Paget through Dr. Billings, was far more interesting than the exhibition of a steel plate of armor, bullet-pierced, said to have been taken from the body of a Confederate soldier at Gettysburg. The wearing of plate armor must have been a very profound secret on either side, but in this instance, no doubt, proving such defense to be valueless.

The beautiful collections of wax models of skin disease now being added to the collection will be welcomed by all the professional visitors of the museum, and even the non-medical visitors gaze with wonder upon things which to them can be nothing less than beautiful nastiness.

The writer regrets that pressure of other duties has prevented him from giving more than a very meagre sketch of things which have now become the necessary part of every doctor's education.

A FEW NOTES FROM VIENNA.

Hospinger Gasse, No. 3,111, St. 10, Vienna, Dec. 12, '89.

Messrs. Editors North Carolina Journal:

Dear Sirs:—Thinking that some of your readers might like a few European notes I enclose you the following:

After making a short rest each at Hamburg, Leipzig and Dresden, I came to Prague, and there met Professor Zafal. He is a very pleasant and courteous gentleman, but speaks no English at all, and hence I came on to Vienna. Here I met Professors Politzer and Gruber, on the ear, and Professors Schroetter and Snitzler, on the throat, and the clinics of these gentlemen, in addition to their well-known reputations, fully demonstrate the fact that Vienna is unequalled as a medical centre throughout Europe.

I have been charmed with Vienna in many respects: First, it is more cosmopolitan than any city I have visited on the Continent, and America is by no means the least well represented, but there are men here from every quarter of the globe. Then the fees are all very low, the tickets for the best professors for a course of six

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Its medical properties are antiseptic, resolvent, astringent, disinfectant and powerfu solvent.

It is entirely non-poisonous and will not injure the most delicate tissues of t youngest child. It contains:

Pure Oxide of Calcium; Flores Sulphuris Loti, thoroughly washed and purifie Benzo Boracic Acid, chemically pure; Oleum Eucalyptus Globulus; Oleum Gaultheri Extractum Pancreaticus, entirely free from fat.

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Sulpho-Calcine is used either in the form of a gargle or spray. If as a gargle it m be used pure or, which is just as well, diluted one-half with water. But if used a spray, it must be in the concentrated form. This also applies when used with eith the swab or the camel's hair brush If any of the medicine is swallowed, no harm w ensue, but on the contrary it will help to relieve the constitutional symptoms, by antiseptic action, as will be readily understood by a study of its component parts.

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weeks being but 20 florins each. The clinics of Professors Gruber, Politzer and others have an apparently exhaustless supply of material to demonstrate from, and the patients have an endless supply of good nature and submit willingly to any amount of manipulation.

Professor Politzer is extremely polite and kind to all foreigners. He speaks English fluently, stopping at all times to translate anything that he has said with great kindness of manner. In addition, he is a beautiful draughtsman, and will paint or draw the views of the ear with wonderful rapidity and skill while lecturing to the class or showing a case.

I have seen five operations for mastoid abscess performed in one month here, and one of which was extremely interesting. It was on a little girl, but the abscess had already penetrated through the dura mater and infiltrated the basilar membranes, hence the little patient died the next day. The post-mortem was made by Prof. Politzer, by whose invitation I was present, and the cause of death was quickly revealed.

Prof. Schroetter's clinic is overrunning with instructive material. There are ten tracheotomy cases in one ward at present, and a great many cases of papilloma, sarcoma, etc., of the larynx. The throat men here, however, do not pay the attention to deformities and abnormatities of the nose as is done in America. In fact, I may say that here one is taught "all throat," and there almost "all nose." To such an extent is this so that on pointing out a patient to one of Prof. Luitzter's chief assistants, who had almost complete occlusion to one nostril from a deflected septum, he said "he did not think any operator indicated," and I believe our American specialist have a just cause for pride in their proficiency in the management of these cases.

There was also at Prof. Schroetter's a woman with a remarkably tolerant larynx. She allowed me to put a bead on her vocal cords and remove it several times without seeming to experience the slightest discomfort. I have also attended Prof. Billroth's, and many other clinics. I saw O'Dwyer's tubes introduced at the Children's Hospital, and they seem to be quite highly esteemed. There also I saw a very large quantity of pus let out of the empyæmic chest of a little child, the air bubbling in and out all the while, and

I was not surprised to hear, consequently, shortly afterwards, of the death of the child.

To-day I showed Prof. Schroetter one of the Self-retaining Palate Retractors, an account of which you published two years ago. He applied it to a patient before the class and seemed very much pleased with its mechanism. I expect to visit Munich, Strasburg and London before returning to America, and will write you any additional notes of interest that I may see. Very truly yours,

W. Peyre Porcher, M.D.

Salines in Peritonitis.—Impressed by the recommendations of Mr. Tait to resort to saline purgative in septic peritonitis, I recommended their use in a grave case of puerperal peritonitis which had resisted opium and quinine in large doses. With two drachm doses of the tartrate of potash and soda every two hours, the pulse and temperature both subsided as soon as full purgation followed and convalescence was at once established. Two months later I was called to see Mrs. M. in the same condition, with the same history, and the result of treatment was identical with the former. The writer has resorted to this treatment in an attack of peritonitis which he personally suffered in the early part of this year. The pain which had resisted large doses of opium was greatly ameliorated when free serous discharges were established and convalescence followed without other medication. We have been taught that opium not only relieves the pain, but by arresting the perstaltic movement serves as a splint to the inflamed membrane. From my own experience I am sure that the peristaltic movement excited by salines in no wise exaggerate the pain. In a case of pelvic peritonitis following labor, the saline purgative gave such acceptable relief that my patient urged the continuance of the drug even after we considered it unnecessary.—Dr. G. W. Miltenberger, *Maryland Medical Journal.*

OBITUARIES.

Dr. J. T. Fuller.

Dr. J. T. Fuller was born at Lynnbank, Granville (now Vance) County, N. C., January 29th, 1837, and graduated in medicine at the University of Pennsylvania in the class of 1861. He passed the Board of Medical Examiners at Morganton in 1861, and located temporarily at Allensville, in Person County, and soon after he moved to Roxboro. In 1862 he served on the Examining Board for the Bureau of Conscription. After that he was County Surgeon, and served for a short time before the close of the war as Assistant Surgeon of State Troops. He died at Roxboro November 30th, 1889.

J. N. F.

Dr. David Prince.

The death of Dr. David Prince took place at his home in Jacksonville, Ill., on December 19, 1889. Dr. Prince was born in Connecticut, in 1816. He graduated in medicine at Cincinnati, and practiced and lectured for a time in St. Louis. Dr. Prince was well known for his wide learning and his surgical skill. He was the first Illinois surgeon to use ether. For some years he had been at the head of a successful surgical sanitarium.—*Medical Record.*

Lewis Hall Sayre, M.D., New York.

Lewis Hall Sayre, a son and assistant of the eminent surgeon, Lewis A. Sayre, died suddenly, some time during the night of January 2d, of heart disease. He had been somewhat run down with overwork, and was in addition a sufferer from the prevailing epidemic, la grippe, but was not known to be suffering from any other disorders, and did not refrain from his professional duties. On Thursday he went to New Jersey to attend a patient, and returned to his father's residence, No. 285 Fifth Avenue, which was also his own home, late at night, after the other members of the family had retired. As he did not appear at breakfast, and his room and bed not having been disturbed, it was supposed that he was detained over night in New Jersey.

While the family were at breakfast the office-boy arrived, and upon opening the office door was terrified to find Dr. Sayre sitting in a chair, cold in death. He had returned in the night, and, after throwing off his overcoat, had seated himself in the office. Apparently he had been taken with a difficulty in breathing, for he had torn his shirt and collar open. An autopsy held by Dr. Delamater and Coroner Jenkins showed a disordered condition of the liver and kidneys—a fact for the first time made known to his father and brother, with whom he was engaged in practice.

Dr. Sayre was born in this city in 1851. He obtained his general education in the College of the City of New York, and his diploma from Bellevue Hospital Medical College. He was an assistant professor of orthopedic surgery in Bellevue Hospital Medical College, and a member of the Academy of Medicine, and several State and national medical societies.

Everyone will feel the deepest sympathy for the bereaved father who has thus twice been suddenly robbed of a son.—*Med. Record.*

DR. JAMES H. HUTCHINSON.

Dr. James H. Hutchinson died suddenly at his residence, No. 133 South Twenty-second street, December 27, 1889, of uræmia. On Wednesday night he retired in good health, and on Thursday morning arose to take his bath. Some considerable time later he was found unconscious. Drs. Ashhurst and Sinkler were summoned, but medical skill failed to relieve him, and he died without having uttered a word from the time he was stricken.

Dr. Hutchinson's is one of the oldest families in Philadelphia, on both sides. His widow was formerly Miss Ingersoll, daughter of the late Charles Ingersoll. Her father, the late I. Pemberton Hutchinson, was widely known, and held a number of important public positions. It was during his Consulate at Lisbon, Portugal, in 1834, that James H. was born. At the age of about four years the deceased came to Philadelphia with his parents. In early life he was sent to a boarding school in New Haven, Conn. Later he returned to Philadelphia and entered the University of Pennsylvania, from which he graduated in arts and medicine in 1858. He then served a term as resident physician of the Pennsylvania Hospital, after which he spent a year in Europe, visiting the hospitals in Paris and Vienna.

Upon his return to Philadelphia he took up the practice of his profession and became prominent in a number of professional, philanthropic, and educational institutions. He was Vice-President and Honorary Librarian of the College of Physicians; was an influential

Manager and Chairman of the Household Committee of the Pennsylvania Institution for the Instruction of the Blind; was a Trustee of the University of Pennsylvania, and took a deep interest in its progress. He was a Director of the Philadelphia Library, and was an attending physician at the Pennsylvania and Children's Hospitals. Dr. Hutchinson was widely known in both professional and social circles. He was a member of the Committee on Membership of the Rittenhouse Club, and was a frequent contributor to a number of medical periodicals. He was also a vestryman of St. Jame's Protestant Episcopal Church. He leaves a widow and five children. —*Times and Register.*

Prof. JAMES LAWRENCE CABELL, M.A., M.D., LL.D.

The Faculty of the University of Virginia, at this Regular Meeting of December 2d, 1889, make Record of the Death of Professor James Lawrence Cabell, M.A., M.D., LL.D.

He died August 13th, 1889, aged 76 years. In the year 1833 he attained the degree of Master of Arts of the University of Virginia; in 1834 he graduated as Doctor of Medicine in the University of Maryland; in 1873 he received the title of Doctor of Laws from Hampden-Sidney College, Virginia.

In December of 1837 he was called from professional study in Europe to the chair of Anatomy and Surgery in the University of Virginia, afterwards changed to the chair of Physiology and Surgery, which he occupied until a few weeks before his death, thus fulfilling nearly fifty-two years of professorial service. During the last thirty years of this service he was the senior professor of the University.

As a member of the Faculty of the University he was conservative in spirit, wise and weighty in counsel, just and firm in judgment.

As a teacher of Physiology and Surgery, he was diligent and successful, constantly imparting the latest results of science, and contributing to its advance.

As a physician, he was skillful and sympathetic, always ready to relieve suffering in hospital or home.

As an associate, he was a friend to each one of us, a private counsellor and a peacemaker. His scholarly attainments and the great dignity of his character inspired profound respect, and ever aroused our earnest emulation.

In his death the University has lost a strong support, the Church a sincere Christian, the State an upright Christian, the world a rare man.

As it is impossible, within the present limits, to do justice to his worth or to the services he rendered in his day, it is proposed to hold memorial exercises on some suitable occasion in public, which shall more fully emphasize and proclaim the excellence of his character, and the value of the work of his life.

CURRENT NOTES.

Milk Sickness Differentiated.—Dr. J. G. Munselle, of Centralia, Illi., expressed a very decided opinion to the effect that no practitioner of ordinary intelligence who has ever seen and smelled a case of genuine milk sickness will ever take it for pernicious fever. He gives the following method of differentiation :

MILK SICKNESS.	PERNICIOUS FEVER.
Prevails only in very limited districts which can be definitely located.	Prevails the world over, in all intensely malarial countries. Can't be fenced.
Affects horses, cattle, dogs, etc.	Lower animals are exempt.
Seldom attacks abruptly and never comes in paroxysms.	Frequently attacks abruptly and comes in paroxysms.
Patient appears dull, stupid and indifferent.	Patient is restless and uneasy, with marked jactitation.
Bowels always obstinately constipated. No voluntary movements.	Bowels very seldom constipated; free from voluntary evacuations.
Abdomen hard, retracted, with marked aortic pulsation.	Abdomen soft, without aortic pulsations.
Has a peculiar odor of the breath that is pathognomonic.	Breath is without any specific odor.—*Medical Standard*.

A Decision as to the Right to Practice.—Dr. S. W. Brooks, a graduate of a medical college in the State of Georgia, was fined

$100 at the instance of the board of medical examiners. From this he appealed to the Supreme Court, which reversed the decision, Chief Justice Stone rendering the following opinion: "It is held that the State, under its police power, clearly possesses the power to prohibit any person from practicing medicine without a license or other test for ascertaining the qualification and fitness of the applicant. The power is supported by the same principle as that which justifies quarantine, compulsory vaccination, sanitary sewerage and many other forms of public necessity. It is a mere agency for protecting the public against the dangers of charlatanism or quackery in medicine. This power is lawfully lodged in the medical boards of the State, and it is no objection that the law goes into effect upon the contingency of the medical county boards being organized in the counties. Local option laws and stock laws are made operative upon precisely the same principle. Brooks had no license from any medical board in Alabama. He had a diploma from a regular medical college of the State of Georgia, which had been duly recorded by the Judge of Probate of Russell county. Section 4,078 of the Code makes anp person liable to indictment and a fine of $100 who practices medicine except in the following four cases; if he fails in either of these categories, he is not guilty of any offense: 1. If he has a license; 2, or has obtained a license; 3, or if he has obtained a certificate of qualification; 4, if he is a regular graduate of this State, having had his diplomas legally recorded." It is obvious from this decision that the State penal code and the medical practice act conflict, and that there was an oversight on the part of those who secured the law, which operates to the advantage of the regular and irregular medical colleges of Alabama. The penal code should be amended in a direction which would tend to deprive all diplomas of their licensing power.—*Medical Standard.*

Chloral for Dandruff.—A solution of chloral hydrate, five grains to the ounce of water, will clear the hair of dandruff and prevent its falling out from that cause. In many instances where the patient is nearly bald, the application of the above-mentioned solution will restore the hair. Arnica oil is also an admirable remedy to promote the growth of hair. A small quantity well rubbed into the scalp three or four times a week can be tried with expectations of benefit.—*Clinical Reporter.*

THE LIABILITIES FOR INJURIOUS PATENT MEDICINES.—The Supreme Court of Georgia has just rendered a decision, says the New York *Herald*, which is likely to attract widespread attention and have a salutary effect on the preparation of patent medicines. It holds that the proprietor of such a preparation is liable in damages for injuries done to any person who takes the medicine according to the directions. This liability does not fall upon the druggist who sells the medicine, but it attaches to the proprietor, even when the consumer buys not from him directly, but from the druggist. Here is the view the Court takes of the matter: "These proprietary or patent medicines are secret or intended by the proprietors to be secret as to their contents. They expect to derive a profit from such secrecy. They are, therefore, liable for all injuries sustained by any one who takes their medicine in such quantities as may be prescribed by them. There is no way for a person who uses the medicine to ascertain what its contents are ordinarily, and in this case the contents were only ascertained after an analysis made by a chemist, which would be very inconvenient and expensive to the public. Nor would it be the duty of a person using the medicine to ascertain what poisonous drugs it may contain. He has a right to rely upon the statement of the proprietor, printed and published to the world; and if thus relying he takes the medicine and is injured on account of some concealed drug of which he is unaware, the proprietor is not free from fault, and is liable for the injury thereby sustained." In rendering this opinion the Court said that it could find no American case in which the precise question had been decided before.—*Boston Medical and Surgical Journal.*

DR. MCGUIRE'S PORTRIAT OF A CONFEDERATE SURGEON.—And now of the Confederate Surgeon let me say a word. How can I express, in adequate terms, my admiration of him! He possessed virtues peculiarly his own. Coming from civil life, it was wonderful to see how rapidly he adapted himself to the discipline of the army, and conformed to the requirements of military life. The hardships he endured, and the privations to which he was subjected, soon transformed him from a novice to a veteran; and I can say, with truth, that before the war ended some of the best military surgeons in the world could be found in the Confederate army. His scanty supply of medicines and hospital stores made him fertile in expedients of every kind. I have seen him search field and forest for plants and flowers whose medicinal virtues he understood and could use. The pliant bark of a tree made for him a good tourniquet; the juice of the green persimmon, a styptic; a knitting-needle, with its point sharply bent, a tenaculum; and a pen-knife in his hand, a scalpel and bistoury. I have seen him break off one prong of a common table-fork, bend the point of the other prong, and with it elevate the bone in depressed fracture of the skull and save life. Long before he knew the use of the porcelain-tipped probe for finding bullets, I have seen him use a piece of soft pine wood, and bring it out of the wood marked by the leaden ball. Years before we were formally told of Nèlaton's method of inverting the body in chloform narcosis, I have seen it practiced by the Confederate Surgeon. Many a time I have seen the foot of an operating-table raised to let the blood go, by gravitation, to the patient's head, when death from chloroform was imminent, and I will add that, in the corps to which I was attached, chloroform was given over 28,000 times, and no death was ever ascribed to its use. Many of the medical officers of this corps were wounded or killed on the field. One, I saw fall at Strasburg, amid the cheers of soldiers at the evidence he gave of devotion to duty. Another at Sharpsburg, facing an assault before which even veterans quailed and fled; and a third I found upon the bloody field of Cold Harbor dying with a shell-wound through his side. As I knelt down beside him, and told him his wound was mortal, he answered, "I am no more afraid to die than I was afraid to do my duty." They were splendid specimens of a noble race—a race whose achievements astonished the world and wrung from the foe himself a full measure of praise· During the terrible six days which followed the retreat of our army from Richmond, the medical men, by their unswerving devotion to duty, and cheerful support, contributed no little to inspire the heroism which turned our defeat into honor, and made Appomattox one of the proudest memories of the war.—*Southern Practitioner.*

HOW TO ACT WHEN BITTEN BY A RATTLESNAKE.—Dr. S. Weir Mitchell contributes to the August *Century* a profusely illustrated article on "The Poison of Serpents," from which we quote the following: ."I am often asked what I would do if bitten while far far from help. If the wound be at the tip of a finger, I should like to get rid of the part by some such auto-surgical means as a knife or a possible hot iron affords. Failing these, or while seeking help, it is wise to quarantine the poison by two ligatures drawn tight enough to stop all circulation. The heart weakness is made worse by emotion, and at this time a man may need stimulus to enable him to walk home. As soon as possible some one should thoroughly infiltrate the seat of the bite with permanganate or other of the agents above mentioned. By working and kneading the tissues the venom and the antidote may be made to come into contact, and the former may be so far destroyed. At this time it becomes needful to relax the ligatures to escape gangrene. The relaxation of course lets some venom into the blood-round, but in a few moments it is possible again to tighten the ligatures, and again to inject the local antidote. If the dose of venom be large and the distance from help great, except the knife or cautery little is to be done that is of value. But it is well to bear in mind that in this country a bite in the extremities rarely causes death. I have known of nine dogs having been bitten by as many snakes, and of these dogs but two died. In India there would have beed probably nine dead dogs."—*Gaillard's Medical Journal.*

PREVENTION OF ATTACKS OF MIGRAINE.—Dr. Hammerschlag, according to the *Allgemeine med. Central Zeitung*, No. 39, employs the following combination of remedies for the prevention of attacks of migraine, and states that hitherto it has not failed him :

Caffeinæ citrat	gr. xv.
Phenacetin	gr. xxx.
Sacch. albi	gr. xv.—M.

Fiat. pulv. Dis. in capsule No. X.

Sig : One capsule to be taken, in the intervals of the attacks, every two or three hours.

Phenacetin, he says, does not act so promptly when given alone. This treatment may be kept up until a decided remission occurs, and this does not have to be waited for long.—*Med. Practitioner.*

SALINE HYPODERMIC INJECTIONS IN POST-PARTUM HÆMORRHAGE. —In the Dresden Lying-in Hospital the plan of introducing a large quantity of a solution of common salt under the skin has been very successfully employed in several severe cases of post-partum hæmorrhage. The solution is of the strength of 0.6 per cent., and the quantity injected is a litre, or a little under a quart. The spots selected for the injection are the infracavicular and the interscapular regions. During the progress of the operation the swelling produced under the skin must be manipulated by a sort of shampooing movement so as to disperse the liquid as much as possible. The advantages of the plan are that it can be easily carried out by any medical man, as it is far less difficult than transfusion, besides which it is not so dangerous. Dr. Münchmeyer considers the plan so suitable for private midwifery that he suggests that a little apparatus, which is made on purpose for it, should always be carried in the obstetric bag, together with the proper quantity of common salt. Boiled water can always be procured, and this, when cooled down to the temperature of the body, 98.6° F., will do very well, though in hospital clinic he employs a more strictly sterilized solution.—*Lancet.*

Regulations Against Leprosy.—The President and Secretary Windom, in view of the fact that leprosy is prevalent in several countries with which the United States has constant commercial intercourse, has issued regulations to keep out the disease as follows: 1. Until further orders, no vessel shall be admitted to entry by any officer of the customs until the master, owner or authorized agent of the vessel shall produce a certificate from the health officer or quarantine officer at the port of entry, or nearest United States quarantine officer, that no person affected with leprosy was on board the said vessel when admitted to free pratique, or in case a leper was found on board such vessel, he or she, with baggage, has been removed from the vessel and detained at the quarantine station. 2. Medical officers in command of United States Quarantines are hereby instructed to detain any person affected with leprosy found on board any vessel, but such officer will permit the departure on outgoing vessels of persons detained at quarantine in pursuance of his regulation, provided such vessel shall be bound to the foreign country from which said leper shall have sailed.—*Medical and Surgical Reporter.*

The *Pacific Medicel Journal* kicks against California being made the dumping ground of the consumptive and his bacteria. It does not think the climate better for such than many other places. It wants the State peopled with the healthy, not with she diseased. A race strong in body and mind cannot be made with blood contaminated with the worst enemy of mankind. California has a better mission than to act as a sanitarium. It should be the birth place of heroes, and men, not of bacilli. If the *Journal* could have its way, it would receive into the State only the strong and the healthy.—*American Lancet.*

READING NOTICES.

A. Rothrock, M.D., McVeytown, Pa., says: "I have prescribed Alteris Cordial in a case of threatened miscarriage. The woman has had three miscarriages in five years. Some six weeks ago, she being in her fifth month of pregnancy, was attacked with hemorrhage, bearing down pains, and all other symptoms of threatened miscarriage. I prescribed Alteris Cordial, which subdued the hemorrhage, bearing down pains, and all nervous symptoms that foreboded the old trouble, and at this time she promises fair to go full term."

Succus Alterans.—Convalescent Hospital, Mabelthorpe, Lincolnshire, England.—*Dear Sir:*—From my experience of "Succus Alterans" I can speak of it as a powerful tonic, and a hæmatinic par excellence. In the anæmic patients in whom I have prescribed it (sic) increased appetite and assimilation of food were very apparent, a rapid increase in weight being the result. Its diuretic action specially recommends it in those cases of dropsy where anæmia forms the principal factor. Looking at its action on the blood and kidneys, with the slight action on the skin and bowels which I have noticed, it should have much to say to the elimination of syphilitic virus from the system. Yours truly,

(Signed) J. A. Feeny,

(M.R.C.S., England; L.R.C.P., London; Surgeon to the Convalescent Hospital, Mabelthorpe; Honorary Member Nottingham Medico-Chirurgical Society; Member Abernethian Society.)

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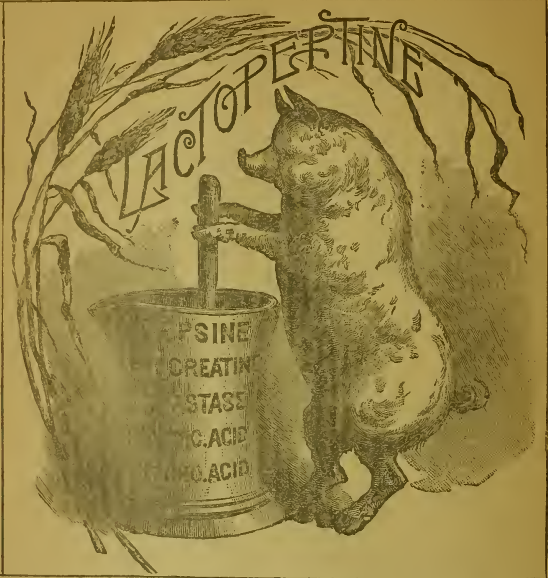

of all those ailments, in which deficient digestion is the direct or indirect cause of pathological conditions.

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NORTH CAROLINA
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THOMAS F. WOOD, M. D.,
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ORIGINAL COMMUNICATIONS.

MEDICINE AND GENERAL PATHOLOGY.

The Gastritis of Phthisis—Gastro-intestinal Ulceration—Arthritic Hæmoptysis—Pericardial Effusion—Massage of Heart—Addison's Disease — Puncture in Intestinal Obstruction — Intussception—Metallic Toxæmia—Bright's Disease: Renal Dropsy; Toxic Nephritis; Hæmorrhagic Nephritis in Suppurative Meningitis; The Histology of Bright's Disease—Pathology and Morbid Anatomy of Chronic Alcoholism—Pathology of Pernicious Anæmia—Transfusion, its Physiology, Pathology and Practice. *Neurology*—Exophthalmic Goitre—Visual Centres—Functions of the Glosso-Pharyngeal Nerve—The influence of the Corpus Striatum and Optic Thalamus on Temperature—Diagnosis of Disease of Corpora Quadrigemina—Localization of Olfactory Sense—Thomsen's and Allied Diseases—Ophthalmoplegia and Polio-myelitis—Hysterical Tremors—Cerebral Abscess and Tumors—The Cerebral

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THE GASTRITIS OF PHTHISIS.

Digestive derangements such anorexia, epigastric discomfort, and vomiting, not infrequently form some of the most troublesome symptoms with which the practical physician has to deal in cases of pulmonary phthisis. And while the clinical aspect of dyspepsia in phthisis has been the subject of more or less attention from Rosenthal, Klemperer, and others, the question from the standpoint of pathological anatomy has been somewhat neglected. The only monograph of importance that has appeared since the older writings of Louis, Wilson Fox, Fenwick, and others, is by Margan, in France, who has in many respects given an able account of the subject both from a clinical and from a pathological point of view. The most recent contribution is from the pen of Dr. Schwalbe, who, bearing in mind the importance of post-mortem changes, took the precaution to remove the stomach in his 25 cases very shortly after death (generally 1 to 2, never more than 5 hours after). He was thus able not only to study more satisfactorily the naked-eye appearances, but also to enhance considerably the value of his histological investigations. In each case he examined the fresh tissue microscopically, and removed portions from different regions of the stomach for subsequent histological investigation. In only two cases did he meet with dilatation of the stomach, and he considers that *ectasia ventriculi* must be regarded as a rare complication of phthisis. As to the state of the mucous membrane itself, except that it occasionally looked slightly thickened and swollen, it presented in the great majority of the cases no morbid appearances worthy of note. The exceptions were one case in which amyloid infiltration was marked, and here the mucous membrane presented multiple but small erosions scattered over the surface. In another case it was decidedly opaque and mottled in yellowish patches; in a third, tubercular ulceration was found near the pylorus. In no case was a thinning or atrophy of it met with, and only rarely was it noticed coated with tenacious mucus indicative of a catarrhal condition. The results of histological examination showed that in five the organ was normal, in fifteen interstitial gastritis was found, but for the most part slight or moderate in degree; of the remaining five cases, amyloid changes were found in one, both in the mucosa and submucosa, and marked parenchymatous degeneration of the glands in four. The interstitial gastritis was invariably in the form of a small-celled infiltration of the intertubular stroma, and in no instance had it developed into fibrous tissue so as to cause atrophy of the mucosa. But in cases where it was more obvious, secondary changes in the tubules were also observed, namely, cystic dilatation and alterations in the epithelial cells. Schwalbe maintains that it is only in cases where the tubules have undergone alterations in position, form and size, that any definite pathological significance can be attached to the accompanying cellular changes. The four instances where the parenchymatous were the only changes noted must be regarded as examples of simple parenchymatous gastritis (Virchow), with extensive fatty degeneration of the cells. He was not able to trace a metamorphosis of the two kinds of cells one into the other (for example, the principal into the parietal, and *vice versa*); nor did he find a perceptible or constant diminution in the parietal or peptic cells, so that in this respect he does not confirm the results of other observers. Coming now to the important question, how far these structural changes are responsible for the functional disturbances, he differs materially from previous writers. He is of opinion that the interstitial gastritis which occurs in the later stages of phthisis is seldom of such extent or importance that any noteworthy impairment of function can be ascribed to it. It never reaches the intensity of that atrophic form in which nearly all secretory power is lost, as Fenwick, Ewald, Rosenheim and others have shown in idiopathic disease of the stomach. Even in the case of simple parenchymatous gastritis it is doubtful whether the hydrochloric acid production is interfered with to any material degree, for in a case of acute yellow atrophy of the liver where no diminution was noted, Rosenheim found extensive fatty degeneration of the tubular glands. He has seen both parenchymatous and interstitial inflammation in persons who never complained of dyspeptic symptoms, and, on the other hand, patients have complained severely of dyspeptic symptoms, in whose stomach there was little or no inflammatory change. Accordingly he holds that it is not possible to establish any constant relation between the pathological conditions and the clinical signs. At the same time he does not state that such changes as he has described are entirely without effect, but believes other important factors must be taken into account to explain the dyspeptic symptoms of phthisis. These are anæmia, nervous depression, atony of the stomach and vitiation of taste from constant expectoration of foul sputum. Regarding the etiology of the gastritis, Schwalbe believes it develops in the later stages of phthisis during the formation of vomicæ, and is to be attributed to the absorption of toxic substances resulting from the necrosing lung parenchyma, which enter the blood and set up a gastritis much in the same way as they may excite a nephritis.

GASTRO-INTESTINAL ULCERATION.

In sixteen cases where hæmorrhages, hæmorrhagic erosions and ulcerations of varying degree were met with in the mucous membrane of the gastro-intestinal tract. Openchowski found hyaline degeneration of the walls of the blood-vessels. His researches were conducted in the laboratory of Professor von Recklinghausen, who had also chanced to come across the same degeneration of the blood-vessels in an early round ulcer of the stomach. So far as concerns the hæmorrhages and hæmorrhagic erosions, two forms of hyaline degeneration were met with: (1) hyaline thrombosis of the vessels within the lumen, the thrombus lying separate from the vessel wall, and often surrounded by red blood cells, and (2) hyaline degeneration and swelling of the vessel walls themselves, affecting chiefly the middle coat. A favorite site was the point of division of the vessel where a knob-like swelling usually presented. The arterial branches were more frequently affected than the venous. As regards the ulcers, the more fully developed they were, and the deeper the necrotic process, the less frequently the blood-vessels so affected were met with, but here, in the base of the ulcer, it seemed as if the perivascular connective tissue had undergone hyaline metamorphosis. In older ulcers the degenerative process was most pronounced at the periphery, possibly the hyaline necrotic tissue in the central part had been removed, or in cases of gastric ulcer had undergone artificial digestion. It is evident that grave disturbances of the circulation must follow upon the hyaline degeneration of the blood-vessels, such as hæmorrhagic infiltration and erosion, which prepare the ground for the subsequent development of ulceration. But what are the conditions favoring the occurrence of hyaline degeneration? In anæmic, cachectic, or otherwise enfeebled subjects—especially if they are exposed to toxic influences—it is easy to suppose spasm and contraction of the vessels take place, whether of peripheral or of central origin. Such abnormal contraction may lead, on the one hand, to temporary arrest of the circulation and stasis of the white blood corpuscles, which themselves may undergo the hyaline degeneration, and so form hyaline thrombi within the vessels. Embolism, whether produced experimentally or otherwise, produces the same effects. Thus it would seem that Virchow's theory as to the causation of gastric ulcer is correct, the only point remaining to be explained being those general pathological conditions that tend to produce the disease of the walls of the blood-vessels.

ARTHRITIC HÆMOPTYSIS.

Sir Andrew Clark has called attention to the occurrence in elderly persons of hæmoptysis not due to tubercular or cardiac disease, and probably due to structural alterations in the terminal pulmonary blood-vessels. He maintains that these vascular alterations occur in persons of the arthritic diathesis, resemble the vascular alterations found in osteo-arthritic articulations, and are themselves of an arthritic nature. As the address in which the subject was unfolded was so recently published in this *Journal*, it will be sufficient to recall his opinion that this form of hæmoptysis usually subsides without the production of further damage, and that it is best treated, not by astringents and the local application of cold, but by quiet, the restriction of liquid diet, the stilling of cough, and the use of calomel and salines, of alkalies with iodide of potassium, and in frequently repeated counter-irritation.

PERICARDIAL EFFUSION.

Though the number of cases in which pericardial effusion has been treated by tapping or incision is still small, the evidence of the justifiability of the operation continues to increase. M. Ferrier has collected twenty-two cases of tubercular pericarditis thus treated; in two cases the operation was completely successful, and in the majority of the rest considerable benefit was obtained, though one case succumbed eight hours after the operation. He also collected nine cases of hæmorrhagic pericarditis, in which the operation had been performed, with five recoveries. Simple aspiration may be sufficient when the fluid is serous, but incision appears to be the better treatment when the collection is purulent. Sixteen cases of purulent pericarditis, treated by evacuation of pus, have been reported: of these, eleven were treated by puncture and all died, whereas, of five treated by incision and free drainage, three recovered. The operation should not be too long deferred, and M. T. Ferrier considers that it ought to be resorted to (1) when the exudation is dangerous, owing to its abundance (in case pleural effusion also exists, the latter should be first evacuated); (2) when, even if small in amount, it shows no tendency to subside, and from its chronic course exposes the heart to fatty degeneration; and (3) when the effusion is purulent, and might give rise to septic conditions.

MASSAGE OF THE HEART.

A peculiar manipulation, to which he has applied the term "massage of the heart," has been recommended by Oertel in cases of cardiac insufficiency, whether due to weakness of the heart muscle or to obstruction due to valvular disease, emphysema, or peripheral pressure where compensatory hypertrophy is not complete. The manipulation is thus performed: The masseur places his hands on either side of the chest of the patient, at the level of the fifth or sixth rib in the axillary line, and moves them forward and downward during expiration till the lower border of the seventh or eighth rib is reached, at the same time exerting pressure. This occupies the whole period of expiration, and is repeated with each inspiration. The following inspiration is deeper, and to this much of the good effect claimed for the method must be attributed, since it must increase the negative thoracic pressure, but Oertel believes that some direct pressure is also exerted on the heart during the manipulation, and that the cardiac circulation is thus facilitated. The method should not be employed in recent cases of endo-, myo-, or pericarditis, nor where there is much arterial atheroma.

ADDISON'S DISEASE.

The most important recent contribution to our knowledge of Addison's disease was published by Dr. von Kahlden in 1888, too late for notice last year. He questions the truth of the widely accepted view that the complex train of symptoms of this disease is to be referred to primary or secondary changes in the semilunar ganglia. Two fatal cases happened to come under his notice, in which the clinical symptoms were so unequivocal that he was induced to study their pathological anatomy with much care and minuteness. The affected adrenals were much enlarged, and the capsule of the organ was thickened. They presented a large caseous centre surrounded by a narrow greyish peripheral zone. Tubercle bacilli were found sparsely distributed in the caseous detritus in both cases. Histologically the capsule was thickened and fibrosed; the grey peripheral zone was the seat of small-celled infiltration, aggregated in closely set patches around dilated blood-vessels; and no traces of the proper cellular structure were discernible. The histological changes found in the semilunar ganglia and the solar plexus in both cases varied in intensity in the individual ganglia: (1) pigmentary atrophy of the ganglion cells; (2) proliferative endarteritis leading to obliteration of the vessels, affecting medium-sized arteries, thickening and small-celled infiltration of the perivascular connective tissue, especially around the veins, and occasionally hyaline degeneration of the walls of the smaller arteries and capillaries; (3) general fibrous thickening of the capsule and of the connective tissue stroma, which here and there was the seat of blood extravasation and blood pigment; (4) perineuritis of the nerve bundles entering the periphery of the ganglia, but little alteration of the nerve fibres themselves. It is evident, therefore, in both these cases that the semilunar ganglia were the seat of important and more or less intense pathological changes, which must have gravely affected their function; and while they tend to confirm the view above mentioned, von Kahlden is careful to reserve any definite conclusions till a larger number of cases have been thoroughly investigated from this standpoint. He refers especially to those cases described by Bell Fletcher and Aran, where the adrenals were unaffected, but other important changes were found in the neighborhood of the semilunar ganglia. He emphasizes also the following points: The symptoms of Addison's disease are far more frequently associated with tubercular disease than with other morbid conditions of the adrenals. Cancer of the adrenals has been observed to occur without the classical symptoms of Addison's disease being present. The progress of the disease may in all probability be referred less to the effects of pressure of the affected adrenals than to the influence of some irritant exerted in their immediate neighborhood. At all events, the remarkable vascular and connective tissue changes in the semilunar ganglia seem to support this view. Regarding the theory of the pigmentation in Addison's disease, his conclusions are as follows: The pigmentation of the skin takes place in the deeper layer of the rete Malpighii and in the outer root sheath of the hair follicles. The pigment, however, is not formed in these cells, but in the deeper layer of the cutis, and transferred by amœboid connective tissue cells. From general pathological considerations, as well as from the relative position of the wandering cells to the blood-vessels, it is highly probable that the pigment is derived from the blood itself ; but the derivation is not to be referred to alterations in the vessel walls or to hæmorrhages, because such conditions are not constant, and when present are usually secondary. In two cases of Addison's disease Bradshaw found tubercle in the one and cretaceous metamorphosis of the adrenals in the other. In the semilunar ganglia, diminution and pigmentary atrophy of the nerve cells and increase in the connective tissue stroma were the changes noted. In association with other morbid conditions, Beaven Rake has described a case of morbus Addisonii associated with syphilis and leprosy. The adrenals were converted into sac-like bodies filled with brown granular *débris* and a few small yellow grains having the appearance of minute tubercles. Whether these changes were the result of leprous, syphilitic or tubercular lesions could not very well be determined- No tubercle bacilli were found. Drs. Samuel West and Hale White have reported cases of Addison's disease associated with diabetes and exophthalmic goitre respectively.

PUNCTURE IN INTESTINAL OBSTRUCTION.

The value of capillary puncture of the intestine in cases of extreme flatulent distension, whether due to organic stricture or to a removal cause, is becoming generally recognized. Our knowledge of the method is chiefly derived from the researches of Dr. John W. Ogle, who not long ago published a valuable little monograph on the subject. He established it as a legitimate procedure, not attended by any excessive amount of danger, capable of giving excellent results when adopted in time, and of yielding the patient much relief as a last resource. At the meeting of the Surgical Congress in Paris, in October, M. Demons, of Bordeaux, reported six cases in which he had made use of this procedure with encouraging results. He used a Dieulafoy's aspirator, so that, if necessary, fluid fæces could be aspirated. His cases were examples of intestinal obstruction, believed to be due to peritoneal bands or inflammation of the subperitoneal tissue. The danger of extravasation of fæces into the peritoneum appears to be small if a fine needle is used, but a case of Sir William Jenner's shows that the operation has certain special dangers. In that case, which was an instance of malignant stricture, each point of puncture was found to have become the seat of a secondary cancerous deposit.

ITUSSUSCEPTIO.

The use of gaseous enemata in the treatment of intussusception has been sanctioned by long usage, but it is not without danger, and though successful cases have been reported during the past year, the use of enemata of water or oil appears to promise better results since the pressure can be more readily measured. A simple means of doing this has been devised by Dr. W. E. Forrest. He assumes that since a column of water 33 feet high exerts a pressure of 15 pounds on the square inch, a column of water in an ordinary not very narrow india-rubber tube will exert pressure of 1 pound to the square inch for each length of 2 feet. Experiment appears to show that in infants and young children it is not safe to use a pressure greater than from 6 to 8 pounds on the square inch. It follows, therefore, that the necessary pressure can be obtained with an india-rubber tube 16 feet long; it is provided with a rectal nozzle at one end and a funnel at the other. The fluid used is warm salt solution, and after the nozzle has been introduced into the rectum the funnel is slowly raised, until the required height is attained.

METALLIC TOXÆMIA.

In a series of experimental researches conducted by Drs. E.

Ziegler and N. Obolonsky with a view of investigating the changes produced by the action of arsenic and phosphorus on the tissues, some interesting results were arrived at, which are well worthy of reference. They will be found published *in extenso.* In order to ascertain the effects of these drugs upon the liver and kidneys, Drs. Ziegler and Obolonsky experimented on rabbits and dogs by the subcutaneous administration of small doses repeated over various periods of time, or by the administration of the drug in the form of pills with their food. The animals were killed from time to time, and the organs preserved. In the case of arsenic, the organs found to be most frequently affected were undoubtedly the liver and kidneys, in which important histological changes were discovered, even in instances where there was little or no evidence of macroscopic change. The changes seem to affect both the parenchyma and the interstitial connective tissue more or less contemporaneously. In the liver, during the whole time of the operation of the poison, degenerative changes in the hepatic cells were in progress, namely, moderate fatty degeneration, dropsical swelling and vacuolation, and molecular disintegration of their nuclei. Here and there a patch was met with in which the liver cells showed signs of proliferative activity. Regarding the interstitial changes, they were very active and of a proliferative character, and were seen mostly around the capillaries and in the interacinous connective tissue. They could be perceived quite as early as the second day, but were most pronounced in the second and third weeks. Proliferative changes had likewise been observed in the epithelium of the bile ducts, but never to the extent of the formation of new ducts. The parenchymatous and interstitial changes appeared to be co-ordinate processes, going on together but apparently independent of each other. From their researches they found that weak doses produced for the most part fatty changes, while strong doses excited active proliferative changes as well. Fatty degeneration was unquestionably the most constant and important effect of phosphorus, but the fatty molecules might, even after prolonged operation of the poison, completely disappear from the liver cells. Vacuolation of the cells occurred simultaneously. The stellate cells of the connective tissue, the capillary walls, and the bile ducts were likewise the seat of fatty changes. Proliferative and inflammatory phenomena were, relatively speaking, rarer than in arsenical poisoning, and very slight even when present. In cases of slight poisoning the kidneys were unchanged, but in advanced cases fatty degeneration of the epithelium, mostly of the straight tubules, was to be observed. In contrasting the operation of the two poisons, the effects produced by phosphorus are pre-eminently degenerative and mainly passive in their character, while those of arsenic are, in pronounced cases of poisoning, strikingly proliferative as well as degenerative, but the proliferation and the degeneration are not related to each other in such a way that the first may be said to be reparative to the second. The cell proliferation is probably induced by the direct influence of the poison on the individual cells themselves. Professor F. W. Draper, in a paper on the anatomical appearances resulting from poisoning by arsenic, says that if, in addition to gastritis, fatty degeneration is found in the heart, liver and kidneys, if the blood is dark and fluid, and subendocardial ecchymoses are also present, there is a strong evidence in favor of arsenical poisoning, and he should be inclined in such a case to call in the chemist to his assistance. It is possible to find sometimes arsenical deposits in the gastric mucous membrane, which is always found more or less reddened, but, with this exception, he would not rely on the results of the examination of any single organ for testimony in favor of arsenical poisoning. The examination of the viscera should be exhaustive and conducted in some systematic order. Ziegler and Obolonsky found the gastric mucous membrane in rabbits comparatively unaffected. Drs. Ed. Coen and Giovanni d'Ajutolo have investigated the histological changes in the kidneys, muscles and gastro-intestinal tract in chronic lead poisoning, and the results of their researches may be briefly summarized as follows: Kidneys: first, parenchymatous degeneration and necrosis of the epithelium of the convoluted tubules with the formation of hyaline casts; secondly, a glomerulitis with hyaline degeneration of the capillary tufts; thirdly, a plastic or productive interstitial nephritis which may gradually pass into renal cirrhosis. Muscles: first of all a granular degeneration of the muscle substance is perceptible; secondly, a patchy interstitial myositis develops. Stomach: parenchymatous inflammation, with a considerable degree of proliferative change in the epithelium of the follicles; to this succeeds patchy interstitial gastritis, starting around the vessels in the submucosa and extending upwards in the stroma between the glands. Intestine:

proliferative inflammation of the submucosa and of the reteform tissue between Lieberkühn's follicles. Liver: cloudy swelling and necrosis of the liver cells, cell infiltration of the walls of the bile ducts, and a new formation of fibrous connective tissue, comparable in all respects with the interstitial nephritis. Thus lead makes its poisonous influence felt first and directly on the specific elements of organs, that is, the parenchyma proper; then it operates on the blood-vessels and perivascular connective tissue, originates patchy inflammatory foci around the vessels, and terminates in organization and the production of new fibrous tissue. It is very slowly progressive, and attacks organs only in a disseminated fashion. It is well-known that lead poisoning is, in certain cases, manifested by acute symptoms. Marked anæmia precedes the onset; the earliest symptoms are colic, headache, vomiting and diplopia, which may be succeeded by convulsions and coma, ending in death in a few days. There may be no albuminuria and no gross post-mortem lesions, but Dr. Stephen Mackenzie has stated that in every instance in which a chemical analysis of the brain had been made at the London Hospital distinct traces of lead have been found. It would appear that these acute cases generally occur among persons newly employed at lead works (Corner). The statistics of the Newcastle Infirmary, as given by Dr. Oliver, are that out of 135 cases 8 died of acute manifestations. All the acute cases reported occurred among lead-workers, but as the symptoms are not very distinctive, it is not impossible that their cause might be overlooked if the patient were not known to have been exposed to lead. In chronic lead poisoning, neuritis and granular contraction of the kidneys appear to be the most common lesions producing symptoms. Lead favors the retention of uric acid in the blood, and thus the outbreak of an acute attack of gout; but many facts go to prove that it does not produce gout in a person not predisposed. Thus Dr. Oliver states that gout is practically unknown among the Newcastle lead-workers.

RENAL DROPSY.

Regarding the pathology of renal dropsy, Dr. Auld believes that that condition of the blood to which the term in anæmia is applied must be regarded as an important factor in the production of the anasarca and dropsy of Bright's disease. First of all it is possible in Bright's disease, as in other conditions, that certain retained products of the organism, or their toxic derivatives, may exert a deleterious influence on the tonicity of the vessel walls. Then we have to consider the grave alterations in the vital and physical properties of the blood when anæmia is combined with hydræmic plethora, and the disturbances of the circulation resulting therefrom. By the progressive diminution in its corpuscles the vital energy of the blood itself is impaired; and by the advancing attenuation of its proteid constituents, the specific gravity of the plasma becomes relatively lighter than that of the corpuscles themselves, and its physical relations to the plasma circulating in the lymph canalicular system outside the vessels are materially disturbed. Under these abnormal conditions the circulation of the blood corpuscles is impeded, the whole vascular tension becomes increased (Hamilton), and transudation of the fluid within the vessels readily takes place; and such transudation will, moreover, be rendered still greater according to the loss of tonicity of the vessel wall, in whatever way we may consider that condition to be brought about. With increasing anæmia the dropsy becomes augmented, and is regulated in its distribution by physical laws. Where the *vis a fronte* is greatest and the circulation feeblest, there the dropsy will be found most marked; namely, in the extremities furthest from the heart. Here the venules become hyperdistended, and are unable to absorb and transmit the lymph which pours forth excessively from the capillaries. Should this state of matters continue, the circulation will fail nearer and nearer the heart, until the fluid accumulates internally, in the serous cavities, lungs and other organs, when death is imminent. A most important and valuable contribution to this subject has been published during the year by Dr. Saundby, whose lectures on Bright's disease handle the subjects of albuminuria, uræmia, renal dropsy and the cardio-vascular changes in an admirable manner. The latest information on these matters will be found set before the reader of these chapters in a terse but very lucid style, while those devoted to the special pathology of the various forms of Bright's disease are enriched by the author's own extensive personal experience. It is a work which will be extensively read and referred to.

TOXIC NEPHRITIS.

Even if Lustgarten's discovery of numerous micro-organisms in the urine of persons suffering from acute nephritis has, so far, not met with much confirmation, the views of Semmola on the toxæmic theory of nephritis have met with considerable support in a discussion which took place at the recent meeting of the Italian Society of Medicine upon Bright's disease. Semmola believes albuminuria to depend upon the malassimilation of proteids, and M. Rattone so far supports this, that he states, in his opinion, nephritis is set up by the transition through the kidney of substances which have a toxic action, [illegible] produce inflammatory changes in the vascular apparatus, the connective tissue and the epithelium. In a large number of cases acute nephritis is the effect of the operation of some poison, whether organic and particulate, such as a microbe, or else of a chemical nature. Dr. Maragliono concurred in this view, and, regarding the acute nephritis supervening in pneumonia, said that although the pneumococcus had not been discovered in the kidney, he had no doubt that the renal inflammation was set up by the absorption of some toxic products from the diseased lungs. These views as to the nature and etiology of acute nephritis occurring in other severe febrile disorders are, in a great measure, confirmed by a paper recently published by Drs. Crooke and Nason on the occurrence of acute hæmorrhagic nephritis in suppurative meningitis. Two of the cases of meningitis were manifestly septic, while the third seemed to be a simple case. In one case the nephritis was undoubtedly secondary to, and caused by, the meningitis; in a second there was strong presumptive evidence of its secondary nature, while in a third its relationship to the meningitis was not so clearly determined, but still highly probable. The distinguishing features of the nephritis were its pronounced hæmorrhagic type, and its resemblance, as regards its intratabular exudation to the inflammatory process in acute croupous pneumonia. In none of the cases were evidences of embolism present, and in none could they satisfy themselves as to the presence of micro-organisms. They mention incidentally another case of acute nephritis of an exquisitely catarrhal type occurring in a case of cancrum ovis; and though various micro organisms were found in profusion at the local seat of the disease, they could not be detected in the kidney. In all these cases, notwithstanding the absence of micro-organisms, the ureters maintain the septic nature of the nephritis, which they believe to have been originated by the absorption of some toxic product allied to the ptomaines or leucomaines, and probably manufactured at the seat of the primary disease. They are inclined to attribute the marked hæmorrhagic character of the nephritis in the cases of meningitis to some obscure nervous influence originating in, and reflected from, so to speak, the vasomotor disturbances common to meningitis.

THE MORBID ANATOMY AND HISTOLOGY OF BRIGHT'S DISEASE.

In a very brief abstract of a paper on the above subject, read at the Pathological Section of the British Medical Association at Leeds this year, it is not difficult to discern in Dr. Crooke a strong adherent to the doctrine of the unity of Bright's disease. The only link he could not include in the chain of evidence is represented by certain cases of chronic interstitial nephritis (red granular kidney), such as occur in gout and other states, where the cardio-vascular changes precede the nephritis. He agrees with Dr. Saundby in not being able, so far as his observations have yet led him, to include lardaceous kidney as a special form of Bright's disease. He has observed lardaceous changes associated in large white kidney, but does not think they bear any casual relation to the chronic inflammatory changes present, which are often quite extensive. In these cases he regards the lardaceous changes as a concomitant morbid process, traceable to the same causes as the nephritis itself. He has examples in his possession, showing the transitional stages of large white into the small white contracting kidney. The paper is based on the examination of a large material—over 150 cases of Bright's disease—and represents work extending over ten or twelve years. Presumably it will be published at some future time *in extenso.*

THE MORBID ANATOMY AND PATHOLOGY OF CHRONIC ALCOHOLISM.

This important inquiry was selected for special discussion at the Pathological Society of London during the session of 1888–'89. The debate was opened by Dr. Payne, who, after a short historical introduction, first propounded his views as to the manner in which alcohol acted as a poison on the tissues, and then proceeded to enumerate the changes found in the viscera and nervous system. These changes appear to be degenerative and productive in their nature: the former affects the specialized or parenchymatous elements of the organs, the latter affects principally the perivascular connective tissue, and appears to be of a chronic inflammatory type, resulting in the overgrowth of fibrous tissue. But whether the one is to be regarded as the primary and the other secondary, or whether both operate concurrently, are questions upon which a considerable diversity of opinion was expressed. Taking the viscera first, the liver appears unquestionably to be the organ most frequently affected, since it is also the first to feel the effects of the poison. Following out his theory as to the toxic action of alcohol, Dr. Payne argued strongly in favor of the view that the essential and primary changes in this organ were the parenchymatous, affecting the liver cells in the form of fatty degeneration and necrosis, while the interstitial changes he regarded as secondary, and present in greater or less degree, according to the chronicity of the case. Dr. Lionel Beale went even further; for what most pathologists take to be a new formation of fibrous tissue he regards simply as the *débris* of the atrophied liver substance, and the entire process, according to him, is simply atrophic. The weight of testimony, however, was in favor of the now widely-accepted view that the connective tissue is the seat of the primary changes, which are mostly slowly proliferative, and may be found to exist even when there is little or no evidence of parenchymatous degeneration present. Coming now to the nervous system to seek for structural changes to account for the paraplegic symptoms, those found in the brain are comparatively unimportant and by no means distinctive; they are simply atrophic, and comparable in all respects to those found in senile decay. But whatever functional or psychical disturbances might be attributed to them, these were ably discussed by Dr. Savage, who dealt mainly with the relationship between alcoholic paralysis and insanity. Little or no change has been found in the spinal cord, while important, and sometimes extensive, changes have been discovered in the peripheral nerve trunks. These consist in degeneration of the nerve fibres and interstitial neuritis, which is sometimes characterized by much small-celled infiltration of the connective tissue. In alcoholic neuritis, the parenchymatous and the interstitial changes seem to go hand in hand, there being no evidence as yet to decide the point as to which is the primary. Dr. Buzzard referred, however, to cases described by Strumpell and others, which formed such marked exceptions to the above rule, that Erb suggested the two processes represented two distinct diseases, namely, a degenerative atrophy of pripheral nerve fibres, and an interstitial neuritis, having no connection with the former. Notwithstanding the absence of any observable lesion, Dr. Buzzard has for some time felt that there was probably some change in the cord responsible for the coincident and limited affection of so many nerves, and some years ago suggested that it was upon the vasomotor centres in the medulla that the toxic action of alcohol was primarily excited. Other changes, evidently secondary to those in the nerves, have been described by Drs. Hadden and Ormerod in the muscles, namely, granular atrophy of the muscular fibres and interstitial myositis, and Dr. Mott found extensive fatty degeneration of the heart in one case. Regarding the kidneys, there is but little evidence to show that any influence can be ascribed to alcohol as a direct factor in the production of granular kidney, though it may materially assist in the presence of other dyscrasin such as gout or lead poisoning. Another point of interest brought out in the discussion was the frequent association of pulmonary phthisis and tuberculosis with alcoholic paralysis. Concerning their pathological relationship, Dr. Hadden thought the pulmonary lesions might be attributed to changes in the branches of the vagus supplying the lungs, which impaired their nutrition tone so as to predispose them to inflammatory changes, and that these latter formed a suitable nidus for the tubercle bacillus to settle in and multiply. Altogether, the discussion has been fruitful in bringing to our knowledge many changes of interest that were previously but little known; it forms a compact and valuable contribution to the literature of the subject, and will serve as a guide to future investigators in their attempts to clear up what still remains obscure or doubtful in the pathology of the disease.

PERNICIOUS ANÆMIA.

In considering the pathology of this disease we are met, as Dr. Russell aptly puts it, on the very threshold of the inquiry, with the following problem: Is it the result of the diminished formation, or of increased destruction of the red corpuscles? For we certainly have to do with a true oligocythæmia in pernicious anæmia, even if the individual corpuscles are as rich, or even richer, than the normal in the amount of hæmoglobin. Assuming that the red marrow is at least one of, if not the most, important seat of blood formation, then, if the replacement of the ordinary yellow marrow of the long bones by red marrow (Pepper and Tyson) be regarded as a morbid change whose presence is essential to pernicious anæmia, Russell thinks there is but one answer to the question of diminished production, and that is a negative one. The change in the marrow has been found also in other wasting, cachectic, anæmic conditions, and in a case of anæmia from hæmorrhage by Neumann; it is the expression of an effort on the part of this tissue to meet the demand for red corpuscles in which it becomes hyperplased. On the other hand, Russell found in the same case of pernicious anæmia evidences enough of blood destruction, the products of which, in the shape of hæmatin pigment in combination with iron he found plentiful in the liver, spleen and kidneys. Not the least interesting part of his paper is that which is concerned with the results of his search for evidences of blood destruction in these organs taken from other cases met with in everyday work of the post-mortem room. The pigment was detected in the usual way by treating either small blocks or thin sections of the tissue first with a solution of ferrocyanide of potassium, and then washing in dilute hydrochloric acid. The pigment comes out stained the color of Prussian blue. In the livers of 44 cases the reaction was marked in 7, and in the spleen in 6 out of the 7, and in the kidney in 3. In 20 cases where no reaction was obtained in the liver, the spleen was examined in 10, 4 of which yielded positive results. From these observations Russell is unable to regard the disease known as pernicious anæmia primarily a liver disease, especially in the face of evidence of blood destruction in the spleen and kidney. No doubt blood destruction does go on in the liver in an exaggerated degree, and this is probably due to some condition in which the blood reaches the liver. But what the antecedent condition of the blood may be we are not yet in a position to state, until the whole history of the blood-elaborating and blood-purifying processes in the body are more fully known. Reference may be specially made to the extremely able lectures of Dr. William Hunter on transfusion, its physiology, pathology and practice, which embody much original research and philosophical thought. They were published in the *Journal*, July to August, 1889, and should be read in their entirety, and the numerous experiments carefully examined, for these constitute mainly the premises from which Dr. Hunter draws his interesting and valuable conclusions as to the utility and practical application of transfusion.

BRAIN—EXOPHTHALMIC GOITRE.

Hale White published a case which he argued showed that exophthalmic goitre was a disease due to a functional disturbance of the central nervous system in the neighborhood of the floor of the fourth ventricle.

VISUAL CENTRES.

Danillo and Lannegrace have studied in the human subject the relation of the cortex to vision, and have come to the conclusion that a lesion of one occipital lobe has no effect on vision, lesion of the angular gyrus affects the vision of the opposite eye for a short time, a lesion of both these parts affects both eyes, producing crossed amblyopia as well as crossed hemiopia. It will be seen that these results agree with those of Ferrier.

LARYNGEAL CENTRES.

In the last number of the *Journal* Semon and Horsley have located the centres for the laryngeal muscles.

INTERNAL CAPSULE.

In a paper read this month before the Royal Society Beevor and Horsley have shown the arrangement of the fibres in the capsule and the effect of their stimulation.

FUNCTIONS OF THE GLOSSO-PHARYNGEAL NERVE.

Pope has published an extremely important case in which a thrombosed vertebral artery pressed upon the left glosso-pharyngeal nerve. There was loss of power of swallowing and of raising the palate of the left side, due to the unopposed action of the levator palati, and complete loss of taste at the back of the tongue on the left side, and loss of taste to sweet things even on the front of the left side.

THE INFLUENCE OF THE CORPUS STRIATUM AND OPTIC THALAMUS ON TEMPERATURE.

Hale White has published a paper on the influence on the bodily temperature of lesions of the corpus striatum and optic thalamus, in which, after carefully taking the normal temperature of the animals operated upon, he injured in some cases the corpus striatum, in others the optic thalamus, in others the white matter. A considerable rise of temperature always followed when the basal ganglia were affected by the lesion, but never when the white matter only was implicated. It is shown that these rises of temperature are much greater than can be accounted for by the administration of the anæsthetic or the mere operation. In rabbits the rise of temperature is bilateral. Some cases published by the same author show that in man a similar rise of temperature occurs in lesions of the basal ganglia, but that the rise is usually greater on the side opposite the lesion. Ott has published three papers on the same subject. In one he argues that in the lower animals at least the rapidity of respiration is the most important agent in regulating the bodily temperature, and that in lesions at the base of the brain the temperature mounts because this regulatory mechanism is disturbed. In his two other papers Ott argues in favor of the nervous origin of fever, using the terminology of Dr. McAlister's Goulstonian lectures.

DIAGNOSIS OF DISEASE OF CORPORA QUADRIGEMINA.

In the following number of *Brain* Nothnagel contributes an important paper on diseases of the corpora quadrigemina, and concludes that there are grounds for localizing a tumor in that position, if unsteady reeling gait is an early symptom, and if it is associated with ophthalmoplegia existing in both eyes, but not quite symmetrically nor implicating all the muscles in equal degree.

LOCALIZATION OF OLFACTORY SENSE.

Hughlings Jackson and Beevor record a case in which there was a small sarcoma at the extreme anterior end of the right temporo-sphenoidal lobe. The patient during life complained subjectively of a very unpleasant smell. As far as it goes this case confirms our ideas of the localization of smell.

THOMSEN'S AND ALLIED DISEASES.

Martins and Hauseman have recorded an important case in which there was spasm upon voluntary effort affecting the upper extremities only. Although in some respects this case resembled Thomsen's disease, yet it was very different in the freedom of the lower extremities, and also the malady did not appear to be constantly present, but only in cold weather. Also a case of Thomsen's disease is recorded in the *Neurol. Central.*, October 1st, 1889.

OPHTHALMOPLEGIA AND POLIOMYELITIS.

Sachs, in a paper on poliomyelitis and polioencephalitis, brings forward a case to show that ophthalmoplegia is related to anterior poliomyelitis of the spinal cord in the same way that the latter is related to bulbar paralysis; so that we have now a complete ascending series of inflammation, affecting either the anterior coronal cells in the cord or their homologues in the brain.

TREMULOUS DISEASES.

It is well known that Horsley showed that experiments upon the thyroid gland may, in monkeys, give rise to tremulous movements. Starr discusses the pathology of tetany and shows that it cannot be due, as has been suggested, to intoxication from the thyroid gland, and he concludes that it must be due to an instability of the nervous system. Diller gives us a very interesting paper on hereditary chorea, and quite confirs the usually received impression that it differs from ordinary chorea in coming on at middle life, in being associated with a weak mental condition, and in never recovering. Suckling has also recorded a most interesting case of hereditary chorea. The patient's mother, sister and daughter had it. This same author also records two cases of Friedreich's ataxia. Pitres, in a paper in *Le Progrès Médical*, Nos. 37 and 38, 1889, discusses hysterical tremors, which he divides into three varieties, namely, (1) shaking tremors, generally limited to one of the lower extremities, and consisting of rapid rhythmical movements of flexion and extension; (2) vibrating tremors, which consist of rapid minute oscillations, and may affect any part of the body; and (3) voluntary hysterical tremors, which are those produced only when some voluntary act is attempted.

CEREBRAL ABSCESS AND TUMORS.

Several instances of operation for cerebral abscess have been published, but they do not teach us anything new, and a great many cases of cerebral tumor have been recorded, but they only show features in localization already well known.

THE CEREBRAL CIRCULATION.

Some experiments performed by Corin show how extremely difficult it is to control the pressure in the cerebral artery by ligature, either of the vertebrals or internal carotids. These results should be borne in mind when considering the possibility of arresting cerebral hemorrhage by ligature of the carotids. Rummo and Ferrannini have studied the influence of hypnotic substances upon the cerebral circulation. They experimented upon cases in which the skull was deficient. During natural sleep from 10 p. m. to 1 a. m. there was ischæmia; from 1 to 3 a. m, vascular dilation; and from 3 to 5 a. m. vaso-constriction of cerebral vessels. Similar observations with drugs show that some substances, such as narceine and morpheine, modify the excitability of the nerve centres; others, such as chloral hydrate, paraldehyde and ethyl urethane, modify the cerebral circulation; while others, such as hypnone and methylal, modify both.

SPECIAL CASES.

Passing now to the more clinical sides of cerebral diseases, we have a few interesting cases to note. Messrs. Wiglesworth and Bickerton called attention to the great frequency of errors of refraction among epileptics. Dr. Hadden has, in the same number of this journal, recorded an interesting case of xerostomia, or dry mouth. Those who wish to study the microscopical appearances of the grey centres in the cerebrum will do well to consult a paper by Vittorio Marchi on the shape and grouping of the cells of the corpora striata and optic thalami. Bernhardt has published some examples of a rare form of spinal and bulbar paralysis complicated with muscular atrophy.

SPINAL CORD—THE CORD IN EPILEPSY.

Messrs. Gotch and Horsley, towards the end of last year, brought before the Royal Society the results of some experiments they had made in which, after the cortex cerebri was stimulated in the monkey, the spinal cord in the dorsal region was tapped electrically and an electrometer introduced into the circuit. There was only a movement of the electrometer when the cortical area for the lower limb was touched, never when the arm or other area was stimulated, even if a strong current was used. The excursions of the mercury of the electrometer were photographed, and it was found that the electromotive changes in the spinal cord are exactly parallel, as regards the character of their sequence, to the convulsions of muscles as recorded by the graphic method. The authors conclude that the existence of the epileptic rhythm in the dorsal region of the spinal cord points to its being almost entirely of cortical origin.

ASCENDING DEGENERATIONS.

Dr. Tooth and Mr. Horsley have studied the effect upon the cord of cutting the posterior nerve roots. They divided all the posterior roots of the cauda equina on the right side. At the level of the fifth lumbar there was a minute point of degeneration at the apex of the posterior cornu; this increased in size as it was traced upwards, till at the level of the third lumbar it occupied most of the postero-external column; in the dorsal region it was much smaller again, and triangular in shape, with the base at the posterior median fissure and the apex coming to the surface between the posterior median fissure and the posterior root; in the cervical region there was only a minute tract of degeneration in the posterior median column close to the posterior median fissure, and a little in front of its posterior extremity. These experiments were performed upon monkeys, and they confirmed those carried out by other observers upon other animals. With regard to the cerebellar tract, Dr. Tooth points out that, in monkeys, at least, in the lower dorsal region, it is composed chiefly of small fibres, and in the cervical and upper dorsal regions chiefly of large fibres which occupy the posterior part of the tract. This was confirmed experimentally; for in the experiments just quoted there was no degeneration of the cerebellar tract; but if the section of the posterior nerve roots was carried out in the cervical region there was degeneration above the section, not only in the posterior column, but also in the posterior part of the cerebellar tract. Consequently the posterior roots do not enter into the composition of the lower part of the cerebellar tract; and it is most probable that its lower part really consists of fine descending fibres which have passed out from the crossed pyramidal tract. These are probably visceral fibres. Most likely the direct cerebellar tract conducts sensory impressions from the upper part of the body and the upper limbs, and the antero-lateral fibres from the lower part of the body and the lower limbs.

CEREBRO-SPINAL FLUID.

Halliburton has investigated the composition of cerebro-spinal fluid, and finds no peculiarity as regards the saline constituents, but great interest attaches to the presence of albumoses and peptones, although no digestive ferment could be discovered which could have produced them. It is curious that cerebro-spinal fluid contains pyrocatechin.

EXPERIMENTAL MYELITIS.

In the *Journal of Nervous and Mental Diseases* for April, 1889, is a long paper on experimental myelitis which was produced by quickly passing a ligature round the cord with a curved needle, and drawing it tight against the spine. It was found that there were almost directly acute inflammatory changes in the grey matter, but the white passed into a condition of inflammation much later. The muscles underwent atrophy with vacuolation of their fibres, with but little increase of fibrous tissue, and no great multiplication of nuclei, a change was produced, in fact, like that found in progressive muscular atrophy.

RELATIONS OF CORD AND VERTEBRÆ.

Reed has shown that it is quite impossible to tell precisely from the position of the spinous processes the position of the nerve roots.

GANGLION OF POSTERIOR ROOT.

Gad and Joseph have confirmed what is known about the trophic influence of the ganglion upon the posterior root. They consider that nearly all centripetal nerve paths are interrupted in the ganglia and that impressions are delayed for 0.036 of a second.

THE KNEE-JERK.

It has for a long while been felt that the usually accepted theory for the knee-jerk, that as the jerk took place in so short a time, it was not a genuine reflex, but that the influence of the cord upon the jerk was due to a presiding influence over the tone of the muscles, is very unsatisfactory, so that it is pleasing to find that Lombard is able to bring strong arguments against this view from the side of experimental physiology, and also that he considers that the knee-jerk is a genuine reflex act, and that the apparent time discrepancy is due to a faulty measurement of the time occupied by the reflex act.

PERIPHERAL NERVES.

Not much new work has been done in this department, but many excellent cases have been recorded, and our previous knowledge has been confirmed. Bradford has shown that all renal vasomotor nerves leave the spinal cord through the anterior roots chiefly from the sixth to the thirteenth dorsal nerves, below this in gradually decreasing numbers to the third and fourth lumbar. There are two kinds, vaso-constructor and vaso-dilator; the former are best developed. Ross has written a valuable paper on the premonitory symptoms of alcoholic paralysis. According to him the most important are (1) disorders of tactile sensibility of the extremities, which the patients usually describe as numbness of the fingers and toes; (2) vasomotor spasm of the extremities, which the patients describe as a dead feeling; (3) cramps most severe in the calf. Behrend has described lesions of nerves in certain forms of alopecia areata, and in the same volume of the same periodical Miura discusses the etiology and condition of the skin in kakke. Déjerine has contributed an important paper, in which he has shown that muscular atrophy is common in those who die of tabes dorsalis, and he considers that this atrophy is due to the peripheral neuritis which so often accompanies tabes dorsalis, and Dr. Weir Mitchell has brought forward a case of locomotor ataxy confined to the arms. Suzuki, at a meeting of the Medical Society in Japan, brought forward cases to show that in leprosy the tendon reflexes are increased; from this he concludes that there must be in this disease changes in the spinal cord. Affleck records two cases in which there was peripheral neuritis associated with Raynaud's disease, but this is probably only an effect of a common cause; at any rate it cannot, for many reasons, be the cause of Raynaud's disease. Suckling has recorded some cases of peripheral neuritis occurring among brass-workers. Mackenzie records a case in which a patient died from rupture of the phrenic nerve; death was instantaneous.

THERAPEUTICS OF NERVOUS DISEASES—HYPNOTICS.

Much interest has been taken in hypnotics, and an admirable summary of our knowledge of the chemistry and physiological action of the newer hypnotics will be found in the address which Professor Leech delivered at the annual meeting of the British Medical Association. Sulphonal continues to hold a high place as a safe hypnotic. The worst results that may follow its use seem to be that sometimes giddiness, headache and weakness of the legs are produced. Some admirable cases showing its value have been published by Drs. Percy Smith, Sutherland and Bond. Chloralamide, too, appears to be a valuable hypnotic, having very few, if any, bad after-effects. It has the advantage over sulphonal that it is more easily soluble and it is much cheaper. In a recent number of the *Journal* Hale White has recorded twenty cases to whom it was administered. Thirty grains is the usual dose, and it dissolves with spirit, and, therefore, a good way to give it is to take it in a little brandy and water about half an hour before going to bed. It is feebly soluble in water. Many Continental observers record successful cases of its employment.

COMPRESSION OF THE CAROTID.

Messrs. Spencer and Horsley have suggested that compression of the carotid artery might be tried in the human subject to control cerebral hæmorrhage, but at present this method of treatment has not found many advocates.

NERVE-STRETCHING IN LEPROSY.

Dr. Beaven Rake has in his Government report studied the effect of nerve-stretching in leprosy. He performed a hundred operations, and came to the conclusion that the best nerve to stretch was the sciatic, for it is nearest the spinal ganglia, and commands the supply of the whole leg and foot and back of the thigh. The operation only seemed to be of value for the pain associated with ulceration, but often in these cases the relief was very marked.

SURGICAL TREATMENT OF GENERAL PARALYSIS AND OF EPILEPSY.

Quite recently Dr. Claye Shaw has recorded in the *Journal* a case in which large portions of the bones of the skull were removed in a patient suffering from general paralysis of the insane; the dura mater was cut and much subarachnoid fluid was let out. It is stated that the patient was much improved after the operation; but, before passing any opinion upon its value, we must have many more cases before us. Dr. Alexander has suggested removing the superior cervical ganglion for epilepsy. It is difficult to know what sound reason there can be for this; for, as far as we know, the superior cervical ganglion has no function that can be concerned in the production of epilepsy. Still, as it has been advised, probably many will be induced to try it. The statistics given are encouraging—so encouraging, in fact, that one is tempted to suspect a fallacy somewhere.

SIMULO IN EPILEPSY.

Stan has confirmed previous observations that simulo is a useful remedy for epilepsy in cases in which bromides have failed. Gauster, after the result of a very large experience in the treatment of epilepsy by bromide of potassium, comes to the conclusion that it is the best mode of treatment we at present possess; but it must be used in very large doses (ʒ iv or ʒ v a day) for a long while, and must be omitted on the appearance of any symptoms of bromidism. The loss of intellectual power and moderate emaciation are not contra-indications, but the patient should eat heartily; wasting diseases are a contra-indication.

SUSPENSION IN DISEASES OF THE SPINAL CORD.

The treatment of diseases of the spinal cord by suspension has attracted much attention. Although Motchükowski, as long ago as 1883, suspended patients suffering from tabes dorsalis, it was not till the commencement of the present year the treatment was brought prominently forward by Charcot and Gilles de la Tourette. The patient is suspended in an ordinary Sayre's apparatus; the feet are just off the ground. At first the suspension lasts a minute, afterwards its duration is gradually increased till the patient remains suspended for about seven minutes. The suspensions take place on alternate days. About thirty suspensions are generally considered enough. Except that in extremely rare cases a rise of temperature has followed, no evil results have ensued when the suspension has been properly applied. Three or four instances of death, probably from dislocation of the cervical vertebræ, have been recorded in patients who suspended themselves. It would be impossible here to criticise all the hundreds of cases that have been published. According to some authors the most striking improvement has resulted. The cases that have been quoted as having done best come from French sources. Thus Charcot reports that in most of his cases the power to stand with the eyes shut is improved, and the patient complains less of vesicle troubles, numbness, anæsthesia, pains and insomnia; and if there has been impotence, sexual desire and the possibility of erections return. As far as can be judged after a year's travel, it seems that those who first tried the treatment over-estimated its value. Thus some cases have been recently recorded in the *Lancet* from the National Hospital for the Paralyzed and Epileptic, in which no good resulted. Dr. Saundby's cases did not improve much. Dujardin Beaumetz has recorded cases in which the most careful tracings of the walking were taken before and after suspension; he is inclined to think that not much good resulted. Abadie obtained the best results in cases in which the diagnosis was doubtful. A careful study of the published cases, and those under our own care, leads us to the conclusion that the symptoms which are most under the patient's will, such as incoordination pains, numbness, incontinence of urine, are certainly benefited by suspension; but the organic symptoms, such as the loss of the reflexes, are not improved. This makes it probable that suspension only acts mentally. That the novelty of the treatment, and the full hope that it will do some good, are perhaps the chief reasons why the patients feel better after it. When the craze for it has died down it will probably cease to be beneficial and will fall into disuse, just as metallotherapy has done. An important paper on the subject by Messrs. Haushalter and Adams has recently appeared in the November number of the *Progrès Médical.* The authors agree with the opinion we have expressed upon the value of the treatment. It has been suggested that the benefit may be due to the separation of the vertebræ, general traction and hyperæmia of the cord (Charcot and Motchütkowski), to anæmia of the cord (Dujardin-Beaumetz), or to tearing down of adhesions of the meninges. By a most careful series of experiments Haushalter and Adams have shown that the lengthening of the vertebral column during suspension is no greater than often takes place physiologically; that even when the vertebral column is stretched, the cord, its nerves and vessels are not appreciably altered. The treatment has been applied in a number of other diseases, such as myelitis, disseminated sclerosis, lateral sclerosis, Friedreich's disease, paralysis agitans, etc., but without much benefit. Quite recently there has appeared in *Brain* a translation of Motschütkowski's paper, and appended to it is the after history of some of his cases; from this it appears that the benefit was permanent, although no more suspension had been employed. Bonuzzi has attempted to obtain all the good effects of suspension without any of its disadvantages, by forcibly flexing the legs on the body and bending the body forwards. From experiments on the dead subject and one experiment upon the living, he concludes the circulation in the spinal cord is profoundly modified.

HYPNOTISM.

In the department of hypnotism the Charcot or Salpêtrière school have not brought forward any new facts. The Nancy school continue to treat patients suffering from the most various disorders by suggestion. Voisin, during his visit to England, related to some of his experiments and their surprising results. In England not much has been done with hypnotism, for the attempts to use it for medical purposes have been chiefly carried out upon lunatics, who, it is universally acknowledged, are the most difficult patients to cure; in fact, it is often quite impossible to hypnotize the insane. The literature of the subject is increasing at an enormous rate, but nearly all the articles published consist of nothing but a short report of cases cured by suggestion. Heidenhain's theory of the hypnotic state still remains the most satisfactory that we have.

RECENT BOOKS AND PAPERS ON NEUROLOGY.

It will perhaps be useful to mention some books and articles which have appeared in England during 1889, and which contain information on special branches of neurology. Such are: "The Surgery of the Spinal Cord," by W. Thorburn; "A Textbook of Mental Diseases," by W. Bevan Lewis; "The Injuries and Diseases of Nerves," by A. Bowlby; "A Textbook of General Therapeutics," by W. Hale White (chapters on hypnotism, electricity, suspension treatment, Weir Mitchell treatment, etc.). The Goulstonian lectures on the secondary degenerations of the spinal cord, by H. H. Tooth (*Journal*, March); the Lettsomian lectures on syphilis and the nervous system, by W. R. Gowers (*Journal*, April); on peripheral neuritis, by J. Ross (*Med. Chron.*, June-December, 1889); on the absence of the corpus callosum, by Alexander Bruce (*Brain*, part xlvi); cerebral localization in its practical relations, by C. K. Mills (*Ibid.*, parts xlv and xlvii); the pathology of central aphasia, by Allen Starr (*Ibid.*, part xlvi); and cerebral localization in its practical relations, by D. Ferrier (*Ibid.*, part xlvi); the morbid anatomy of chronic alcoholism, by J. F. Payne (*Path. Trans.*, 1889); on the value of eye symptoms in cerebral disease (*Ophthal. Trans.*, 1889). —*British Medical Journal.*

SELECTED PAPERS.

THE PRESENT EPIDEMIC OF INFLUENZA.

A Clinical Lecture delivered at the Pennsylvania Hospital, January 11, 1890, by J. M. Da Costa, M.D., LL.D. (Reported by William H. Morrison, M.D.)

Gentlemen:—The occurrence in our midst of an epidemic of catarrhal fever or influenza, and the fact that we have had a large number of cases of this disease in our wards, have suggested the propriety of giving you a lecture on the subject, in which the prominent groups of the disease might be laid before you, and which would serve to illustrate not simply a single case, but the varieties of this strange malady.

It is not my purpose to treat the subject historically, but rather to view it clinically. I have myself passed through more than one epidemic of catarrhal fever, and can claim familiarity with its symptoms; and comparing what I have seen in previous epidemics with what I have found in this, I shall be able, as I proceed, to point out how the present epidemic differs from those of previous years.

This widespread malady, which has committed such havoc on the Continent of Europe, and which has proven itself here, in the last month, so destructive to comfort and so perilous in its secondary consequences, is of uncertain origin. It comes, it goes. It comes without warning; it disappears, leaving behind it sporadic cases, but speedily loses all trace of its epidemic form. As I have told you, however, I propose to treat the subject from a clinical standpoint, rather than view it pathologically or in its broad general aspects. I shall, therefore, introduce my subject by showing you a few cases which illustrate different types of the malady.

Case 1.—This man, a German, was admitted to the hospital January 9, 1890. His family history is good. He does not drink, and has had no severe disease. Eleven years ago he had some kind of fever, but has not been ill since then. The present illness began abruptly, December 25th, with chilly feelings up and down the spine, followed by headache and some cough, which occurred in paroxysms, and was especially severe in the evening. There was no expectoration. He had a general sore feeling. There was slight constipation and soreness over the abdomen, which was thought to be due to the cough. The eyes and nose discharged freely. He consulted a physician, and in a day or two improved; all the time he continued at work. January 6th he began to show signs of a relapse. All his previous symptoms returned with great severity, and he became so weak that he could not stand. On admission into the hospital he had cough, a sore feeling all over, the eyes discharged freely, the temperature was 99°, pulse 76, and respiration 28. A few bronchial râles could be detected. The tongue was tremulous, flabby and slightly coated. The knee-jerk was present; the urine was of a dark amber color, specific gravity 1034; no albumin.

Examining him this morning, we find that the tongue is covered with a white coat. He still has watery eyes and cough; the temperature is 98°; he has harsh respiration at the base of the left chest; at the lower part of the right chest posteriorly the respiratory murmur is feeble, and on percussion the resonance is not so great as on the left side. We find the same signs anteriorly. There is, therefore, some congestion of the lower part of the right lung. The heart sounds are normal so far as murmur is concerned, but the first sound is rather feeble, which corresponds with the very compressible state of the pulse. The bowels still tend to constipation. He does not perspire except after the paroxysms of coughing.

Case 2.—This man is thirty-three years of age. The present attack began two weeks ago with dizziness, some vomiting and cough. The bowels were constipated. There was sore throat and coryza. Although a strong, robust man, he rapidly grew very weak. There was profuse sweating after coughing. There was no special shortness of breath. There was general soreness, with a great deal of pain in the bones, especially at the wrists; none in the spine. The great debility was the most marked symptom in this case, and was the more noticeable on account of the former condition of the man. A few days ago he had repeated chills and tremulousness of the hands. The constipation has, in the last day or two, been succeeded by diarrhœa. When admitted the temperature was 98°, the pulse 76, and the respirations 20. The patellar tendon reflex was present. The urine was dark, with a specific gravity of 1030, of acid reaction and contained a trace of albumin, which still persists. It is but fair to state in this connection that the man has been a free liver. He also showed signs of a good deal of catarrh. The eyes were watery. Coryza existed in the early part of the attack, with considerable sneezing.

He is still very weak. This morning the temperature is 98.4°; the pulse is 60 per minute and is extremely weak; it is absolutely thready. The first sound of the heart is so feeble that it can barely be detected. This is very much like the heart we get in an advanced stage of typhoid fever, barring, however, the difference in rapidity. Here the heart is slow, while in typhoid fever it is usually rapid. There is no murmur, but a distinct, sharp second sound. There is harsh respiration on the left side, and some impairment of resonance below the area of harsh respiration, showing congestion. Râles were noticed, but I do not hear them this morning. The splenic dulness extends just to the margin of the ribs. The hepatic dulness is normal.

In the way of treatment he has received for the throat a gargle of salicylate of sodium with glycerin and water. He has taken 12 grains of quinine a day, and a mixture containing muriate of ammonium. This cough mixture need now be given only occasionally, and we shall order him four ounces of whiskey a day and one-hundredth of a grain of strychnine every fourth hour. He will also have turpentine stupes applied to the back of the chest, especially on the left side.

There are so many cases of this malady in the hospital that, in one clinic, I could hardly exhaust them. But I will show you one more case, which is of great therapeutic interest.

Case 3.—This man is twenty-six years of age, and has been in the hospital since December 26th. When admitted his temperature was 100°, pulse 88, and respiration 34 per minute. His eyes were injected and his tongue coated. His heart's action was weak, and there was noticed reduplication of the first sound and a faint systolic mitral murmur. The man was very weak. The lungs were normal, with the exception of a few mucous râles. His symptoms were those of such prostration that he was thought to be in the so-called typhoid condition, and the opinion was entertained that it might possibly be a case of latent typhoid fever. Indeed, he was so drowsy that we could not get any account of his illness, and this added much to the difficulty. Watching the man, we found that there was not the least evidence of typhoid fever. There were no spots, no diarrhœa, and the splenic dulness extended only slightly below the margin of the ribs. The peculiarity of this case is that while, almost from the beginning, the temperature has been between 98° and 99°, and the pulse extremely feeble, he was dull, his pupils somewhat dilated, and he was extremely delirious. He could not sleep at night, and the only sleep obtained was by the use of small doses of chloral. This, with the prostrated condition, suggested the possibility of typhoid fever. As his mental condition improved, it became clear that this was not the case. He told us that he had had symptoms of coryza, pain in the bones, and all the symptoms of the prevailing epidemic.

Let us see what his condition is to-day. He, too, has a weak first sound, but not so weak as in the preceding case. He has a compressible pulse, moderately weak. The lungs are clearer. He has had no cough since admission and the mind is clear. I think that this is an undoubted case of influenza.

What I desire particularly to call your attention to is the violent and persistent delirium which was present, and the manner in which it was relieved. When I first saw the man I was struck with the sluggish, dilated pupil; the feeble pulse and the extreme delirium, with a temperature which was normal or slightly subnormal. It at once occurred to me that here was a case of delirium from inanition. This I have seen more than once at the end of an attack of typhoid fever, or any other depressing disorder interfering with nutrition, such as cancer of the stomach, where the brain is disturbed because it does not get a proper amount of stimulus of blood. I had the man placed on liberal supply of food given at short intervals and associated with stimulants, and in twenty-four hours the delirium had passed away. It was clearly a case of delirium from inanition. Do not misunderstand me. Do not suppose that this is a specific delirium. As I have said, I have seen this delirium in other typhoid conditions, using this term in a wide sense, as a result of the brain being illy supplied with its proper stimulation of blood. The man is now convalescent, and simply requires a chalybeate tonic. We shall give him 5 grains of tartrate of iron and potassium three times daily. The stimulation with a liberal supply of food will be continued.

Leaving these cases, I shall make some general remarks upon this disease, to which, for some absurd reason, we have applied the French name "la grippe," which means nothing so far as the disease is concerned. Influenza or catarrhal fever, as is illustrated by these cases and many others that I have lately seen, almost invariably begins acutely. Nearly all of the cases that I have met with started suddenly in persons previously in good health. One case came under my notice where a physician was so abruptly seized with pain in the back that he had to lie down on a bed, and with difficulty could leave the house. In other instances, not quite so marked, the severity of the pain in the back has been great and has been the first manifestation of the disease. The pain is often referred to the middle of the back in the dorsal region, and it is quite commonly observed that starting in this position it spreads downward into the legs. As described to me, the pain is at times sharp, with a dull pain persisting. The patient is never free from pain, which occasionally rises into acute exacerbations. While many of the cases begin with pain in the back, they soon have pain in the bones followed by headache and moderate fever, and then there are or are not catarrhal symptoms.

I have partly traced the development of the disease in these patients; let us now pay some attention to the character of the fever with which these painful sensations soon become associated. In the majority of instances the fever is moderate and lasts about three or four days. The fever is at its height in from twenty-four to thirty-six hours; then it slowly subsides, and the temperature may go below normal. In one case it passed to 96°, and there was profuse sweating, something like a crisis taking place. During the period of highest temperature lasting thirty-six or possibly forty-eight hours, there is only the ordinary variation of about one degree between the morning and evening temperatures. There is really a slight continued fever, and not a fever with remissions and exacerbations as in malarial fever. As a rule, the temperature does not exceed 103°; but, by way of variety, I have in this epidemic encountered a few cases in which the temperature at the onset unexpectedly shot up to 105°, and the next day went down to about 100°, and then the case ran the ordinary course, terminating in recovery. In two of these cases bloody sputum or pure blood was at first expectorated.

With the fever we have the ordinary concomitants; high colored urine of a high specific gravity, without albumin. In one of the cases before you there is a trace of albumin in the urine, but as the man is of rather intemperate habits, it is a question whether it does not belong to the individual rather than to the disease.

Another peculiarity about the disease is the occurrence of catarrhal symptoms in the eyes and nose with cough, which is frequently laryngeal rather than bronchial. These catarrhal symptoms are, however, often absent. Some of the worst cases that I have seen have had no catarrhal symptoms whatever in the eyes, throat or anywhere else. When the catarrhal symptoms are present they are more apt to involve the eyes, nose, throat and larynx, than the bronchial tubes, although a fair proportion of cases have catarrhal bronchial râles, and some have even congestion of the lungs, as illustrated by the cases before you. In a few instances epistaxis comes on, and with the occurrence of high fever and debility you are irresistibly made to think of beginning typhoid.

One of the most singular features of the present epidemic is the prevalence of the nervous symptoms. As I have stated, I have passed through other epidemics of catarrhal fever, but this one seems to be stamped by the prominence of the nervous symptoms. These are shown by the violent headache, the severe pain all over the body, the pain in the spine travelling downward, and also by what I have seen in quite a number of cases, hyperæsthesia or general sensitiveness of the surface. This is something more than what might be attributed to the efforts of coughing. Then, too, in some of the cases, there is delirium, not simply the delirium of inanition, as occurred in one of the cases before you, but a delirium with violent headache, this delirium sometimes taking strange forms. In one case, that of a most refined lady, who, when well, would hardly recognize an oath, when she became delirious from an attack of influenza, swore at her doctor every time he entered the room. I have been told of instances in which patients have lost their minds from the violence of the headache and the delirium. Besides the delirium there are in some cases convulsions. About a week ago I was called by Dr. Rosenthal to see a young man who, while in perfect health, was seized with violent headache, severe pain in the back, pain in the limbs, slight catarrhal symptoms, considerable congestion of the lungs, but no pneumonia. Almost from the onset he had spasms in the arms.

The spasms were most marked in the left arm, although the right was also affected. He was very restless and slightly delirious, but not markedly so. His temperature, almost from the beginning, was 97°. I found him with pupils somewhat dilated and head slightly rigid, and the presence of cerebro-spinal fever at once suggested itself ; but further investigation showed that this was not the case. There was no eruption; the spasms were limited to the arms; there was congestion of the lungs; and, above all, there was no fever, the temperature remaining about 97°. The only thing that gave any relief from the spasms was chloral. Notwithstanding the fact that atropine and opium were used hypodermically this patient gradually sank under the violence of the disease. I know of one case in which paralysis of the lower extremities has followed influenza. It is slowly yielding and the patient will recover. This case had a marked history of a preceding attack of influenza. I know of several others in which convulsions occurred. The kind of cases I have just mentioned have probably given rise to the idea with some that cerebro-spinal fever and influenza are the same disease. The prostrating influence of the malady on the nervous system is also shown by the fact that patients often stagger on getting out of bed. A prominent lawyer whom I recently attended, thinking that, as he was compelled to remain in the house, it would be a good time to get up his work, sent for his papers, but a few minutes' attempt cured him of this idea and he was glad to lie down. This debility remains for a long time and is often associated with considerable sweating. The pains often remain, and do not necessarily pass away on the subsidence of the rather short fever. In some cases profuse and persistent sweating is also very common during convalescence, and the patient looks anæmic and miserable. I have seen the knee-jerk absent at the height of the malady, but in the majority it is preserved. Cramps in both calves and shoulders, as well as in the chest muscles, have been reported to me by a physician as happening after the febrile stage had passed.

The main *complication* of ordinary catarrhal fever is, as you know, pneumonia, or what is called pneumonia. Looking over the records of boards of health of different cities, it will be found that the deaths from pneumonia have nearly doubled. What is called pneumonia must therefore be set down as one of the chief complications. You notice that I say "what is called pneumonia." A great many of these cases are simply heavily congested lungs, with great debility, the lungs seeming to collapse. There does not seem to be a true process of pneumonic exudation. While in many cases there is slight dulness on percussion, yet it is not absolute, and the high-pitched bronchial breathing of croupous pneumonia is found in only a few instances. There is no consolidation. This has been the characteristic in most of the cases that we call pneumonia. It is probably proper to speak of these cases as pneumonia, but I want you to bear in mind the difference between this condition and ordinary croupous pneumonia.

Let me call attention to another peculiarity that I have noticed in a large number of instances. A great many persons when seized, and often during the height of the attack, complain of violent pain in the left side, but I have not found any friction sounds, save in one instance, and this may have been accidental. There is want of expansion of the lower part of the lung, usually on the left side, associated with this violent and persistent pain, which makes the patient think that he has pneumonia or some other grave condition of the lung.

We know nothing of the cause of this disease. It is epidemic, and I think myself that it is feebly contagious. It would be an admirable thing if some of our over-filled treasury could flow into the channels of science, and that a commission be appointed to investigate this disease bacteriologically and chemically. We accept the microbic nature of its origin, but it has not been proven.

The prognosis is favorable, but the general mortality is increased by the epidemic. This is because persons previously diseased are carried off. For instance, in these two cases with feeble heart, if any unusual exertion were made the patients would probably die. If an elderly person with fatty heart contracts this disease, for it is no respecter of age, he would be in imminent danger. We call this heart failure, but these hearts are diseased and enfeebled still more by the malady. In the two cases before you, I think from the previous condition of the patients and their age that there was no feeble heart prior to the present illness.

I have mentioned relapse. I have seen few distinct examples of this. One was that of a lady who had her first attack in the country and came to town to break it up. She was well for two weeks, when she was attacked the secod time. Another case was that of a gentleman who was suddenly seized with the relapse while in church, two weeks after the first attack. In a third case pneumonia occurred in the relapse. The longest interval I have known was two weeks, the shortest five days. To prevent relapse, great care is necessary in not going back to work too soon, and not exposing one's self to wet and cold, and with this there should be a judicious use of tonics, and even of stimulants.

Now, a few words in conclusion with reference to the treatment. The treatment must, of course, be the ordinary treatment of catarrhal affections. For the relaxed and irritated throat, I have found nothing so serviceable as a gargle of salicylate of sodium, glycerin, and water. For the nasal catarrh, which at times is very unpleasant, I have found that a two per cent. solution of cocaine does the most good. The bronchial catarrh should be treated as any other bronchial catarrh, according to the exact seat and the number of râles. A good deal of the paroxysmal cough is laryngeal, and you will find that small doses of opium at night, or bromide and opium, or what I have employed in a number of cases, broken doses of Dover's powder, will give good results. One-fourth of a grain of codeine, repeated according to the circumstances of the case, is often useful: it allays the cough, induces sleep, and does not cause much sweating. Let me say here that, while perhaps the routine practice of using diaphoretics in these cases is useful, yet such drugs must be used with judgment. In some cases there is a great tendency to sweating, and you do not want to increase it, as it rather adds to the debility. The diaphoretic must be adapted to the individual case, not employed too actively, and not at all where sweating is a prominent symptom.

The debility must be borne in mind, and it is good practice to give sulphate of cinchonidine or quinine, ten or twelve grains daily. Nourishment should be kept up, and the action of the bowels looked after. The patient should not be overpurged, for, in some instances, diarrhœa is associated with the malady.

For the headache and the pain in the bones I have found two remedies of especial advantage. One is antipyrin in five-grain doses, with a grain or two of quinine to prevent depression, repeated every two or three hours until the headache is relieved; the other is phenacetin in five-grain doses. In one instance where these two drugs failed to relieve the headache I found gelsemium to answer.

The general strength and the circulation must be looked after, and especially during convalescence the patient must receive nutritious food, alcohol, small doses of strychnine, and, later, iron.

I shall not speak of the treatment of the complication pneumonia, but let me point out, in concluding these remarks, that you should keep your patients for a long time on tonics which may prevent relapse, and, indeed, it may be a question whether it would not be advisable, when the disease makes its appearance in a household to place the whole family on the use of tonics, such as cinchonidine or quinine, as a preventive. My experience is that while this will not ward off the disease, it renders the attack less severe.

I have made these cases an opportunity to lecture to you upon the prevailing epidemic, and I trust that the illustrations that I have given will serve to enforce the lessons laid down and leave a clear picture of the affection upon your minds.—*Medical News.*

GLEANINGS FROM MONOGRAPHS.

Dr. Henry C. Coe* reports a successful case of laparotomy and supra vaginal amputation of the uterus for rupture of that organ occurring in labor. When he was called to the case in consultation, an examination revealed two tumors, the larger one filling the right side of the abdomen, and the smaller occupying the left fossa of the ilium. They were both hard. The larger one was the uterus in firm contraction, and the smaller one the head of the child. The cervix was lacerated antero-posteriorly, and on the left side a rent was found extending through the vaginal junction. To relieve the collapsed condition of the patient, hypodermics of brandy and ether were given, and an incision of eight inches made into the abdominal wall. The rent was found to involve the left broad ligament and the lower segment of the uterus, and the child's head was caught and held in the rupture. The free arterial hemorrhage from the broad ligament made suture of the uterus inadmissable, and the cervix was constricted by a rubber cord, and the child extracted through the rent. The uterus with the ovaries and tubes was immediately excised, and the bleeding vessels tied. The torn peritoneum was sewn with a continuous cat-gut suture, the cavity was washed out with hot water and the stump, trimmed down, was secured in the wound with long needles. No drainage was used. The bladder was not injured, but the cervix sloughed in consequence of the severe lacerations it had sustained. Peritonitis was avoided by free catharsis and the use of the ice-bag. The stump of the cervix came away at the end of a week, and, after suffering with a severe diarrhœa and an extensive sloughing of the bottom of the vaginal wound and all the cervix except the vaginal portion, the patient was dismissed at the end of the fifth week.

This is the first report of a recovery after such an accident and so radical an operation. The patient had been under anæsthetics for three hours and delivery attempted by the forceps and by version by the physician in charge before Dr. Coe saw the patient.

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*A Successful Case of Laparotomy and Supravaginal Amputation of the Uterus for Rupture, by Henry C. Coe, M.D., M.R.C.S.. Reprint from the *Medical Record*, Nov. 2d, 1889.

Dr. Henry O. Marcy* reports 14 cases of hernia covering the inguinal, femoral and ventral varieties successfully operated on and cured; the method is briefly to open the sac, restore the contents to the abdomen, or, if necessary, remove them, and dissect up the sac up to the base of the ring. It is then sewed with continuous cat-gut suture and resected. The balance is restored to the cavity and the obliquity of the canal is preserved by duly suturing the opening of the ring upon the cord and the introduction of simple sutures along the pillars downwards and inwards to the pubic tubercle. The skin is neatly approximated by a blind running stitch, including only the deeper layers of the skin. The incision is dried, dusted with iodoform and covered with iodoform collodion in which a few fibres of cotton are introduced. No further dressing is needed.

Dr. Marcy claims that this is a safe and satisfactory operation, and all of his cases have recovered without a dangerous symptom.

Dr. T. H. Manly, of New York city, in commenting on Dr. Marcy's operation, said that he considered cat-gut equally as good as the tendon suture, and that it had so far been acceptable to operators. He is of the opinion that the ideal and simplest operation for the radical cure ofhernia is McBurney's—the cicatrization which is the essential feature of the operation by its density filling up the track of the hernia and securing the patient most certainly against a return.

Dr. H. D. Didama, of Syracuse, New York, said he had been allowed the pleasure of witnessing several of Dr. Marcy's operations. It was to his mind the safest and simplest that he knew of. As the return of the hernia was practically impossible if the suture material was good, there was no cause to expect septic peritonitis, no need for drainage, no stitch abscesses, such as were often seen of sewing through the entire thickness of the abdominal wall, and the patient had little or no pain after the operation, and was not confined to bed but a few days.

Dr. Joseph H. Warren, of Boston, said that while he endorsed in general the technique of Dr. Marcy's operation, he thought the claims for the superiority of animal sutures were set too high and

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*The Cure of Hernia by the Use of Burind Antiseptic Animal Sutures, by Henry O. Marcy, A.M., M.D., LL.D., Boston. Reprint from reports from Section on -urgery American Medical Association, in the *Journal of the American Medical Association*, November 2d, 1889.

their safety not proven. He preferred iron dyed silk, for its strength and the relative smallness as compared with the cat-gut or tendon suture that was used. His method of dealing with the sac differed from Dr. Marcy's in that he sewed up the mouth of the sac after the redundant part had been cut off, with a purse mouth. Over these he puts another set of stitches, which partly include the muscular walls, entering some distance back from the edge of the ring. When all the sutures are tied, the sac and muscular tissue are puckered and infolded at the site of the ring.

Dr. Marcy, in closing the discussion, said that if McBurney's operation was so eminently superior why should not the so-called open method be adopted in laparotomy, where strength of tissue was much desired to prevent ventral hernia? Moreover, it was a strange violation of the law of all modern surgery which seeks to promote primary union in wounds, that here, where infection was most feared, the reverse should be held to be the safe plan. The reprint is much enhanced in value by the wood-cuts which accompany it.

Dr. George T. Harrison,* of New York, in an address before the Virginia Medical Society last year, took the ground that the practice of disinfection of the vagina previous to the birth of the child was doubly dangerous, first, because it deprived the parts irrigated by the antiseptic solution used of its mucus discharged therein to facilitate the progress of labor, and left this portion of the genital tract in a condition of dryness, which was both hard and unyielding, and exposing certain spots to later infection by the destruction of the epithelial covering. But there is another light and a more important and conclusive one, in which to view the practice. Quoting from Bumm, a noted bacteriologist, he says that *septic infection* is one form of intoxication and produced by the penetration of definite pathogenic germs into the living tissues, while *putrid* intoxication is the result of the reception into the blood of chemica substances, and to the latter condition Duncan has given the name *Sapræmia.* But there is no evidence that micro-organisms of septic infection exist in the vagina of healthy women, and if they are found there they must have come from without, that is, from the neglected external genitalia, or from the accoucher himself. The essence, then, of obstetrical antisepsis is the thorough cleansing of the accoucher's hands, clothes and instruments and the external genitalia before and during labor and afterwards, if further interference is necessary, and the washing of the wounded tract after labor clean of all matters that would set up septic infection by the introduction of specific and well-known germs and of putrid intoxicatiion or *sapræma* by the presence and absorption of matters in a state of decomposition, as ptomaines.

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*A Further Contribution to the Study of the Ætiology and Prophylaxis of Puerperal Septic Infection, by George Tucker Harrison, A.M, M.D., New York Reprint from Transactions of the Medical Society of Virginia, 1889.

Dr. Henry O. Marcy,* of Boston, has reviewed the more modern literature of the subject of inversion of the uterus and its treatment, and introduced a method of his own. The relief was to be had by elastic pressure applied at the same time upon the fundus and cervix, and the following method was devised to effect it: Four metallic rings are first tied into the cervical tissue, and a strip of pure rubber 1¼ inches wide by 18 inches long, slit at both ends to near its middle, is threaded through the rings and continuous traction made. This is the application of the elastic force of the rubber band upon the fundus, and it is applied through the rings which envelope the cervical portion of the uterus and act as a fulcrum. This led to frequent experiments upon the cervical tissue as a point of application of suture material for forcing dilating tampons into the length of the canal. When he met his first case of inversion after waiting for it twelve years, he modified his proposed procedure by introducing with a large, full-curved Hagedorn needle "long ligatures of No. 8 braided silk deeply through the cervical tissues on each of the four sides, equidistant, and brought them into fixation with the repositor. A steady, uniform pressure was kept at about 8 pounds by the scale." This repositor seems to have a staff in which a sliding bar is placed, at the distal end of which is a cup which is to be placed against the inverted fundus, and the threads that have been carried through the cervical tissue are made fast to the side of the staff. The bar is moved by a spring with a scale in pounds, and this is at the end nearest the operator's hand.

In the case reported the operation was completed and the instrument removed in twenty-six minutes from the commencement of the pressure. There was no return, and the recovery was rapid and complete.

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*Chronic Inversion of the Uterus Reduction by a New Method, by H. O. Marcy, A.M., M.D., LL.D., Boston. From the *Journal of the American Medical Association*, July 20, 1889.

EDITORIAL.

THE NORTH CAROLINA MEDICAL JOURNAL.

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Thomas F. Wood, M. D., Wilmington, N. C., } Editors.
Geo. Gillett Thomas, M. D., " }

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THE CENTENNIAL OF THE DISCOVERY OF VACCINATION—HOW SHALL IT BE CELEBRATED IN THE UNITED STATES?

The century ending with May 14, 1896, will have marked a complete revolution in the mortality of the human race. The day that Jenner demonstrated the principle of vaccination by taking lymph from the hand of Sarah Nelmes, the milkmaid, and inoculating the boy Phipps—May 14, 1796—began a career of immense value to the world in the saving of life and in the reduction of blindness and other blights upon the human organism. Immense tables gleaming with facts about the reduction of mortality have not nearly so much significance as the perfectly patent truth known of all men, that small-pox is no longer a scourge, carrying off its thousands, but is so rare that for years many communities never hear of it. Not only has the disease been greatly diminished, but confidence is everywhere felt in the means available to stamp it out should it come, until that security has given to us generations of men and women who remain unvaccinated. But vaccination has done still more for the world than protect it against small-pox, it has been the inciting cause which has led to protective inoculations and to the quickening of thousands of active minds throughout the laboratories of the world, in their search for prophylactic microbes. What the study of inflammation has been to the pathologist, the study of vaccination is now to the experimental bacteriologist. Every mind is engrossed with an ideal vaccination, so that the word is made to do service in illegitimate connections, in their zeal to establish principles in advance of sufficient facts.

The medical profession of America should at once put on foot a movement to note in some appropriate manner the centennial of Jenner's discovery. In Germany a motion to inaugurate a like memorial is about to be made. It needs no argument to bring American doctors to the conclusion of the greatness of Jenner's work. While they have generally given but superficial study to the principles and practice of the great prophylactic art, all will concede to him the honor of having done more for the saving of life than was ever done before or since.

How it is best to make this memorial we can only suggest. Let every State Medical Society select two representatives to confer with each other upon a plan, with a view of making a literary monument. This might consist of the following subjects :

(1) A historical sketch of Jenner's work, with a supplement of all the apocryphal claims, and pre-Jennerian hints, and items which have come to light since his discovery.

(2) A historical sketch covering the introduction of vaccination into the United States.

(3) Statistical material demonstrating the prophylactic power of the practice.

(4) The pathology of vaccinia, including its relation to variola.

(5) The introduction and career of animal vaccination in America.

(6) The existing laws regulating the practice of vaccination.

(8) A collection of all the portraits, cartoons, etc., etc., which have been suggested by the practice of vaccination, with a few of the best portraits of Jenner.

(8) A bibliography of all the American literature of the subject.

A memorial of this sort handsomely published, in a volume similar to Burggræves' "*Monument à Jenner*," or Crookshanks', in recent volumes, published in 1879.

DR. EDWARD CARRINGTON FISHER.

The announcement of the death of Dr. Fisher, first Superintendent of the first North Carolina Asylum for the Insane, will recall to the minds of a passing generation the commanding figure, the benevolent mien, the intellectual impress of the pioneer in the care of the insane in our State.

It is hard to realize that our first State Asylum for the insane only dates back to 1854, and that the structure, now antiquated, was among the best in the South. Dr. Fisher came to North Carolina from Virginia, where he had been an assistant to Dr. Stribling in the Western Asylum of Virginia, and came to this State with the confidence and respect of his old associates, and at once became established in his work and in the affections of the people, especially those to whom he was related as the physician and friend of an afflicted member of a family. Few will forget the natural kindness of manner of Dr. Fisher, and the sympathetic tone of his letters in reply to the anxious enquiry of friends.

There is no sadder chapter in the history of the Asylum than the one recording the displacement of Dr. Fisher, by the heartless adventurers who had our dear old State subdued and manacled, and, following the spirit of the hour, nothing was too sacred to be made subservient to the greed of aspirants. It is too sad a business to open again the bitterness of that time, and it is not becoming, as we are attempting to pen in feeble lines the love and honor in which we hold the memory of one who gave the vigor of his professional life to the unfortunate insane of our State.

We give space to an obituary notice taken from the *Southern Churchman*, which will be found elsewhere in this number.

REVIEWS AND BOOK NOTICES.

Hand-Book of Materia Medica, Pharmacy and Therapeutics, including the Physiological Action of Drugs, the Special Therapeutics of Disease, Official and Extemporaneous Pharmacy and Minute Directions for Prescription-Writing. By Samuel O. L. Potter, A.M., M.D. Philadelphia: P. Blakiston Sons & Co., 1012 Walnut St., 1890.

This portly volume, of now 766 pages, has been the outgrowth of a small "Quiz-compend," a little work that met with immediate favor from undergraduate medical students. Appreciating the good thing he had done, the author set to work industriously to elaborate and extend his volumes, until now it has reached the dignity of a competitor of all the regular treatises.

After giving the usual preliminary of a classification, the articles of the materia medica are taken up alphabetically. In the second part we have a dissertation on Pharmacy and Prescription-Writing, an aid to the student which is very much needed since the study and practice of pharmacy are no longer a part of the medical student.

Part III. is one section of this work which has perhaps made it so popular with student and doctor. Other works on therapeutics give a double index, one of which is an index of remedies; this one goes farther, and gives a whole chapter to the application of remedies to diseases, arranged alphabetically by diseases, concluding each subject with one or more appropriate prescriptions.

The appendix gives the Latin words and phrases used in medicine—formulæ for hypodermic tablets, and a chapter, the like of which we have never noticed before in a similar work, on the formulæ for some of the better known "patent" or proprietary medicines. There are many other very useful things in this appendix, such as differential diagnoses, notes on temperature in disease, obstetrical memoranda, obstetrical memoranda, clinical examination of the urine, ethics, etc., etc., bringing together so many things essential now and then to know, that wherever the book is used it must become a favorite. To make it more available there is a thumb index for the following sections: "Classification," "Materia

Medica," "Pharmacy," "Incompatibles," "Therapeutics," "Appendix," and "Index."

As far as we have examined the author has given us the new remedies down to as late a date as was safe to venture an opinion about their value. Until an inspection of this volume it was new to us, but we have at once given it a place in our library for handy reference.

ANÆSTHETICS, ANCIENT AND MODERN—their Physiological Action, Therapeutic Use, and Mode of Administration; together with an Historical Resumé of the Introduction of Modern Anæsthetics—Nitrous Oxide, Ether, Chloroform, and Cocaine, etc., etc. By George Foy, F.C.S. London: Baillière, Tindall & Co., 1889.

The author has dedicated his interesting treatise to "Hunter McGuire, M.D., LL.D., etc., etc., as a token of personal friendship." It would seem that, after Sir James Y. Simpson's very exhaustive historical account of the evolution of anæsthesia, the field had been pretty well swept of items. We have here, though, in the opening chapters, some interesting accounts which we do not remember to have seen in print before.

In reöpening the discussion of the priority of the discovery of ether anæsthesia, we do not see that the author has thrown much light upon the subject, although it is interesting to see brought together again all the points which have accumulated. It is news to this writer that "Morton's first attempt was to procure a patent, giving Jackson 10 per cent. to be quiet," which, if true, throws some new light on a much vexed question. As the historical items of the use of ether are more thoroughly collated, it leaves us to believe that there was really no one person who can be considered its discoverer. The monument to the discovery of anæsthesia erected in Boston is perhaps juster, than that the personal claims of any man entitle him to the distinguished place as *the* discoverer.

This volume is made up of a series of articles once contributed to the *Dublin Journal of Medical Science*, and is readable and is readable and instructive, giving due credit to some long neglected medical men in this country, and bringing to light some old authors resurrected by the "English Text Society."

The apparatus illustrated in the last pages of the book are numerous, but not particularly suggestive of any improvement, or helpful in this bright essay, it having historical flavor enough without such a tail piece.

The fact that the author has dedicated his work to Dr. Hunter McGuire is enough to make it popular with our readers. It is for sale by Messrs. West, Johnston & Co., of Richmond.

A HAND-BOOK OF DISEASES OF WOMEN, INCLUDING DISEASES OF THE BLADDER AND URETHRA. By Dr. F. Winckel, Munich. Edited by Theophilus Parvin, M.D. P. Blakiston Son & Co., 1012 Walnut St., Philadelphia, Pa., 1889.

As copious as is the literature of gynecology there seems always to be room for another good book. In this work we are spared a dissertation on the anatomy of the organs, the author going at once into deformities and diseases and lesions of the vulva and vagina. More than usual care is taken to make this branch of his subject complete, and we find here many points not usually elaborated.

We like to give the author's utterance on Alexander's operation, as being candid, fresh, and in accordance with the views of many who have ventured to do this new operation: "The results of this operation, as hitherto published, are by no means favorable, indeed, not even encouraging. In most instances in which a favorable result was reported the patients were not long enough under observations. The principal objection to this operation will always be that it simply replaces one anomaly by another, the abnormal shortness of the round ligaments producing an abnormal fixation of the uterus in anteversion, or eventually anteflexion. It remains questionable whether this " will not finally produce as much discomfort as the retroflexion. Moreover, in this operation no notice is taken of the real cause of the retroflexion, viz: the relaxation of the sacro-uterine ligaments, for if they are relaxed the vaginal portion will not remain in its normal position without a pessary. Acknowledging the operation to be perfectly safe, it may be asked what is its value if it does not obviate the necessity of wearing a pessary? In my opinion it will in a short time become obsolete." (Page 332.) This quotation is a pointer whereby we may estimate the practical, and apparently well-practiced, views of the author.

The section on anomalies in diseases of the breast has the merit of being short and clear, and illustrated by the microscopical appearance of the diseased glands.

A stout little volume of 766 pages, it invites one to its perusal by its handiness and its beautiful typographical appearance. This volume is one of the very successful treatises belonging to Blakiston's Manuals for Medical Students, and is sold at $3.00 in cloth.

TEXT-BOOK OF MEDICAL CHEMISTRY FOR MEDICAL AND PHARMACEUTICAL STUDENTS AND PRACTITIONERS. By Elias H. Bartley, B.S., M.D. Philadelphia: Lindsay & Blakiston, 1890.

This book is designed for the use of students who have had no elementary training in physics and chemistry. There is no use to say that medical students ought not need such a book, because their collegiate training has brought them along as far as this, for the truth is, that not only do medical students generally neglect physics and chemistry, but many medical colleges despair of getting up any interest in the study, and so make the course almost optional.

We have examined this little volume with pleasure, and find it to be just the thing for the average student, and it would be a great thing for the profession if every doctor entering the profession was as well equipped in this one branch as he could be by mastering it.

The space devoted to the analytical chemistry of the urine is very short, and, although concisely given in tabular form, intending to lead the student to correct results, is not sufficient to enable him to make the practical tests, he ought to be able to make in life insurance and other cases.

The Glossary, which concludes the volume, is useful and well conceived to serve the student also as an index.

The author has brought his book up to the latest date in all practical matters, and, as we expected from one who has been a sanitary chemist, the article on the analysis of drinking water is to be commended, like many other practical hints that would occur to a teacher who had the medical student in his mind.

THE CURE OF CROOKED AND OTHERWISE DEFORMED NOSES. By John B. Roberts, A.M., M.D. P. Blakiston Son & Co., Philadelphia, 1889.

This essay by Dr. Roberts was contributed to the Philadelphia County Medical Society, and has been reprinted from the Transactions and put in this permanent shape. It is worthy of preservation for reference, as the occasional case of deformity of the nose which comes to the office of the general practitioner is one that cannot be put off. He must either correct the deformity himself or be able to give him the advice necessary to have it done.

MASSAGE AND THE ORIGINAL SWEDISH MOVEMENTS; THEIR APPLICATION TO VARIOUS DISEASES. By Kurre W. Ostrom. Philadelphia: P. Blakiston Son & Co., 1890.

This little book explains by text and illustrations all that any one but a professional masseur wants to know about the useful art. Massage has taken its place very properly as an adjunct of treatment, if its over-zealous propagators will not run it in the ground by inflating its importance. Get this booklet if you want all you need about massage. Price 75 cents.

SALT BY INSUFFLATION FOR THE RELIEF OF FACIAL NEURALGIA, ODONTALGIA AND ALLIED NEUROSES.—Dr. George Leslie reports to the Edinburgh Medico-Chirurgical Society, in detail, an account of 30 or 40 cases of facial and other neuralgia, cephalalgia, odontalgia, etc., which were cured in most instances instantaneously by insufflation of powdered common salt through the anterior nares. The salt was either snuffed or blown up the nostrils. He had been unsuccessful in only two cases of old standing, which had been treated frequently by morphine injections. In one of them excision of the nerve had been practised.—*British Medical News*.—[Very simple, if true.—EDS.]

TO REMOVE POWDER STAINS.—1st. Wash the skin with the following :

℞.—Ammonii biniod.,
Aquæ destil................. āā part æqu.

This causes the spots gradually to change to red.

2d. Remove the red stains by applying dilute hydrochloric acid.—*l'Union Medicale.*

ANNUAL MEETING NOTICES.

THE MEDICAL SOCIETY OF THE STATE OF NORTH CAROLINA

Will mill meet in **Oxford on the 27th of May,** at which time and place a Board of Medical Examiners will be elected to serve six years.

THE BOARD OF MEDICAL EXAMINERS

Will assemble on the **Monday** preceding the meeting, that is, on the **26th of May,** for the convenience of applicants.

THE NORTH CAROLINA BOARD OF HEALTH

Will meet at the same time and place, and assemble in Conjoint Session with the Medical Society of North Carolina one day during the Session.

THE AMERICAN MEDICAL ASSOCIATION

Meets in **Nashville May 20th.** Dr. Atkinson, the Secretary, desires that North Carolina shall have a full representation. Dr. Hays, Secretary of the Medical Society of North Carolina, has received information as above, and there is a prospect that we may have some visitors from the "American Medical." They would receive a hearty welcome.

* * *

THE great preventives of suicide in the sane are a pure life and a strong religious faith. The man who knows in his heart that he has honestly done his best, and who believes with his whole heart in a Supreme Being who will take care of him in the direst extremity, cannot, being sane, take his own life,—*H. C. Wood.*

SUCCUS ALTERANS.

(McDADE.)

SUCCUS ALTERANS is a purely vegetable compound of the preserved juices of Stillingia Sylvatica, Lappa Minor, Phytolacca Decandra, Smilax Sarsaparilia and Xanthoxylum Carolinianum, as collected by DR. GEO. W. MCDADE exclusively for ELI LILLY & CO., and endorsed by DR. J. MARION SIMS.

SUCCUS ALTERANS continues to gain favor from its remarkable Alterative and Tonic properties, *eliminating specific poison from the blood* and *increasing the proportion of red corpuscles in anœmic patients* to a wonderful degree; is endorsed by the medical profession and in use by many hospitals of note.

SUCCUS ALTERANS in venereal and cutaneous diseases is fast supplanting Mercury, the Iodides and Arsenic; and is a certain remedy for Mercurialization, Iodism and the dreadful effects often following the use of Arsenic in skin diseases.

SUCCUS ALTERANS is also strongly recommended for its Tonic and Alterative effects in many forms of scrofulous disease, and in all cases where anæmia is a factor. Such patients rapidly develop a good appetite, sleep soundly and gain flesh rapidly. Many cases are on record where patients increased ten to twenty-five pounds in weight in a few weeks.

SUCCUS ALTERANS is giving satisfactory results in treatment of *Chronic Rheumatism* and can be used with confidence.

SUCCUS ALTERANS may be given for any length of time, without injury to the patient.

SUCCUS ALTERANS is put up in pint round amber bottles and *never in bulk.*

Price, $2.00 per bottle.

Send for copy of our Hand-Book of Pharmacy and Therapeutics. Useful for reference and contains much valuable information.

PIL. APHRODISIACA.

(LILLY.)

Phosphorus and **Nux Vomica**, as is well known to the profession, act as powerful tonics to the nervous system, especially the spinal cord, and can be relied upon as possessing real aphrodisiac power. The **Damiana** used is the genuine **Turnera Aphrodisiaca.** By our process for the manufacture of **Phosphorus Pills**, a thorough subdivision of phosphorus in the mass is obtained, and, with a coating perfectly **protecting** it from **oxidation,** there is nothing to be desired. It is necessary that the administration of this pill be continued from **three to four weeks**, or until the **system is thoroughly under the influence of the remedy.** It is indicated in **mental overwork, sexual debility, impotency.** It is decidedly beneficial in cases of **nocturnal emissions**, the result of excesses, **mental apathy,** or indifference, and in an **enfeebled condition of the general system,** with **weakness or dull pain in the lumbo sacral region.** In diseases of the **reproductive organs** of the female, and especially of the uterus, it is one of our most valuable agents, acting as a **uterine tonic,** and gradually removing abnormal conditions, while at the same time, it imparts tone and vigor; hence, it is of value in **Leucorrhea, Amenorrhea, Dysmenorrhea,** and to remove the tendency to repeated miscarriages.

One Hundred Mailed on Receipt of $1.00.

ELI LILLY & CO., Pharmaceutical Chemists, Indianapolis, Ind., U. S. A.

SUPPLIED BY ALL DRUGGISTS.

The Truth About Pepsin.

THE competition among pepsin manufacturers for the past year has been so great as to lead to not a little misrepresentation by the less scrupulous as to the actual facts. The controversy over the subject of pepsin tests and standards and comparative digestive power has gradually simmered down to a recognition of certain facts which all physicians should now recognize. These may be briefly stated as follows:

Since the last revision of the U. S. Pharmacopœia there has not been a single instance where the remedial value of a preparation has been so greatly enhanced, through the instrumentality of the manufacturing pharmacist as in the case of pepsin.

This achievement has resulted from the elaborate researches which have been conducted in the department of our laboratory devoted to original work. We have thus been enabled to increase the proteolytic or digestive power of commercial pepsin to a standard forty times higher than that required by our Pharmacopœia, and, at the same time, imparted to our product certain qualities which have been heretofore regarded as verging on the impossible.

Our products are to be distinguished from the so-called "insoluble" pepsins by their property of readily dissolving in water. This fact alone is an evidence that certain insoluble matter with which pepsin is ordinarily contaminated has been rejected by our process of manufacture. The contamination here referred to is dried mucus, which possesses no proteolytic power whatsoever, while its presence serves to render the product exceedingly unstable.

Another class of pepsins includes certain soluble forms of the ferment, but these products are invariably of an exceedingly hygroscopic nature and are very prone to deterioration, finally resulting in a total loss of proteolytic power. Aside from the loss in peptic power, the putrescible character of the contaminations above enumerated gives rise to certain products of decomposition, usually evidenced by the pronounced and disagreeable odor, suggestive of incipient putrefaction. This already-existing tendency may favor further changes when a product of such highly complex nature is exposed to influences of warmth, moisture, and other conditions inseparable from the alimentary canal, and leucomaines or ptomaines of a nature harmful to the human subject may be developed. It is therefore evident that pepsin should be free from any obnoxious odor, and that such a product should alone be prescribed by the physician.

Our pepsinum purum in lamellis and pepsinum purum pulvis meet all the requirements of a typical preparation, not only as regards their freedom from toxic substances, but in point of digestive activity as well. Both are capable of dissolving two thousand times their weight of coagulated egg albumen under the conditions of our published test, but should the experience of physicians indicate that a still greater activity is desirable, we are prepared to meet their wants in this direction, as a degree of activity has already been reached by us which is many times that of our present standard.

We supply pepsin in the follwing forms:

Pepsinum Purum in Lamellis; Pepsinum Purum Pulvis; Pepsin, Saccharated, U.S.P., 1880; Pepsin, Glycerole, Concentrated; Pepsin, Lactated; Pepsin, Liquid, U.S.P., 1880; Pepsinum Purum Tablets, 1 gr., Sugar-Coated.

All information desired by physicians as to our pepsin products, our general line of standard medicinal preparations, pharmaceutical specialties, and latest therapeutic novelties and improvements in methods of medication, will be promptly furnished on request.

PARKE, DAVIS & COMPANY,

DETROIT AND NEW YORK.

CURRENT NOTES.

Prescription for Psoriasis.The favorite prescription of Mr. Jonathan Hutchinson for psoriasis is :

℞.—Acid. chrysophanic, grs. x.
Liq. carbonis deterg. (Wright's), ♏ x.
Hydr. amm., chlorid., grs. x.
Adip. benzoat., ℥ j.
Misce, fiat unguent.

At night the patient should wash the diseased surfaces free from all scales; then, standing before a fire, rub on the ointment, devoting, if possible, half an hour to the operation. This proportion of chrysophanic acid is not irritating, and stains the linen but slightly. With some cases, even a weaker chrysophanic ointment is entirely sufficient. Internally, Mr. Hutchinson prescribes arsenic, though he is not convinced that it is an important adjunct.—*Archives of Surgery.*

[Liquor carbonis detergens here mentioned is a very valuable antipruritic remedy, and is an alcoholic tincture of quillai saponaria and coal tar.—Eds.]

Dr. I. E. Atkinson's Conclusions as to the Oxytocic Effect of Quinine.—1. The cinchona preparations have not a fixed and definite influence in causing contractions of the uterus. 2. An oxytocic action is occasionally produced by these remedies. This action depends upon idiosyncrasy; and, as in the other idiosyncratic reactions to cinchona, it is impossible to foretell, in any given subject, its manifestation. 3. There is some evidence that this action is only exerted under large doses or in debilitated subjects. 4. Cinchona and its derivatives should be employed during pregnancy with great circumspection and should be at once withheld upon the supervention of symptoms indicating a uterine-motor influence.—*Am. Jour. of the Medical Sciences.*

Trichinæ in Swine.—Professor E. L. Mark has recently published the results of the examination of 3,064 hogs raised in the vicinity of Boston, Massachusetts (Report of Massachusetts State Board of Health). The examination extended over the five years, 1883 to 1888. The results show that 14.07 per cent. of the males and 10.61 of the females were infected with trichinæ. Similar examinations of Western hogs have shown only from two to three per cent. to be infected. Professor Mark reaches the conclusion that this difference is probably due to the character of the food given to those raised in the vicinity of Boston and presumably in the vicinity of other large cities. Of the fifty-six raisers of the hogs examined by him fifty-one fed city offal. The source of the infection he believes to be in the uncooked meat found in kitchen garbage. It would be interesting to know the condition, in this respect, of the large number of hogs fed upon this food in and about the other large cities.—*Brooklyn Medical Journal.*

CHOLERA ADVANCING TOWARD EUROPE.—According to the *Lancet*, there is good reason for believing that the epidemic of cholera which has for so many months hung about the Tigris and Euphrates valleys, and the interior of Mesopotamia, has made considerable inroads into Persia. News of its having crossed the western boundary of that empire has been received from time to time, but it is now announced at the Faculty of Medicine of Paris that there has been an alarming increase of the disease in Central Persia an on the Turco-Persian frontier; and that the people are fleeing northward. Those who can afford the journey are endeavoring to reach Russian ports on the Caspian, and remembering that this is the route into Europe which cholera has so often taken before, the announcement must be regarded as one of no little gravity.—*Medical News.*

THE DRY METHOD OF OPERATING.—Dr. W. W. Van Arsdale, in the *Annals of Surgery*, describes a dry method of operating as practiced by Dr. Landerer, of Leipsic, and reported by him in a paper before the late Congress of Surgeons in Berlin. The method consists in not allowing a drop of fluid of any kind to come in contact with the wound during the operation. The instruments are boiled and kept in a weak carbolic solution. The hands of the operator and the field of operation are cleansed first with soap and water and then with a one-in-two-thousand solution of sublimate in alcohol. As soon as the first incision is made no more fluid is allowed to come in contact with the wound. Sponging is done with pieces of sublimated (absorbent) gauze, and all parts are kept tamponed with it, except at the point where the surgeon is working. Hemorrhage is much lessened by this method; hardly any vessels in the muscles require ligation. As soon as the operation is finished, and the larger arteries are tied, the wound is to be kept tamponed for a few minutes with gauze, after which it presents absolutely dry surfaces, and is in excellent condition to unite primarily. Buried sutures are used to bring the deeper portions together; the skin is united by sutures. No drainage-tubes are applied; but all the blood finally forced out of the wound by direct pressure. There is no secretion whatever, so that no care need be taken to evacuate it. Even cavities may be treated in this manner (as after castration) provided the walls can come together. The dressings are to be applied under moderate pressure of the bandage. The advantages claimed for this method by the author are the following: 1. The patient does not get at all wet or chilled. 2. Hemorrhage is minimized. In cases of amputation of the breast, where the axillary glands were removed, the towel placed beneath the shoulder was not even wet. 3. No antiseptic substances are absorbed, and therefore no intoxication is possible. (Sterilized gauze would be even safer to use.) 4. The duration of operations is shortened, because there is not so much time spent in controlling hemorrhage. 5. Rapid and safe recovery. In the 90 cases of the author he never once observed a flush around the wound; the temperatures never once rose above 100.4°. There is no secretion from the wound, so that only one change of dressing is necessary to remove the stitches. The patients are not prostrated, even after larger operations, such as excision of the breast and axillary glands, and can be up and about as soon as the effects of the anæsthetic are past. 6. Great convenience of the method. Instead of big bottles, unreliable dishes and fluids, as are met with in country practice, well-packed gauze may be carried along in a small tin or glass vessel, thus simplifying matters greatly for the general practitioner. 7. The hands of the surgeons are not harmed or roughened, which is a great comfort. The author reports 90 cases, mostly all major surgical operations, such as amputations, resections, laparotomies, extirpations of tumors, osteotomies, plastic operations on the nerves, etc. They were performed partly in his private hospital, partly in city and country practice, and partly in a crowded dispensary.—*Pacific Medical Journal.*

THE IODINE in *Fucus vesiculosus* (bladder-wrack), reputed an antifat remedy, is, according to L. von Italie, 0.01 per cent.—*Med. and Surg. Reporter.*

OPHTHALMIA NEONATORUM.—If it be slight, washing with B. naphthol every hour daily and two to three hours nightly; if severe, use the arg. nitr. to destroy the gonococcus.—*Arch. of Gynac., etc.*

THOMAS ON DISEASES OF WOMEN has been translated in Chinese, showing the great advance the study of systematic medicine is making in the Celestial Empire. We needed nothing like this to certify the great excellence of the work.

THE death of Sir William Gull is announced as having occurred on the 29th January. He was 70 years of age. Sir William was a prolific contributor to the medical journals, as well as a teacher of wide repute at Guy's Hospital for twenty years

COCAINE IN YELLOW FEVER.—In summing up the value of cocaine in the treatment of yellow fever, it may be stated to be almost a specific, in my experience doing more to cure this disease than any other drug I have ever tried, taking away or removing all nausea and vomiting, acting as a diuretic and as an excellent and sure "heart-tonic and stimulant."—*American Journal of the Medical Sciences.*

WARNER'S SAFE KIDNEY AND LIVER CURE.—In Germany each maker of patents must furnish the government with the formula for the patent he makes. This is the one furnished by Warner for the patent he makes. This is the one furnished by Warner for "Safe Kidney and Liver Cure." Each bottle contains:

Extract of lycopus virginiana (the herb)	308	grs.
Extract of hepatica (the herb)	322	grs.
Extract of gaultheria	7½	grs.
Potassium nitrate	39	grs.
Alcohol (90 deg.)	2½	ozs.
Glycerin	10	drac's.
Water sufficient to make one pint.		

Any one can make this nostrum equally as well as Warner.—*Formulary and Druggists' Magazine.—Omaha Clinic.*

A Physician's Dangers.—Dr. D. Maury, of Atlanta, suffered a severe misfortune lately, says the *Dixie Doctor*. He was treating a babe with ophthalmia of the new-born, and also a case of gonorrhœa. In some way he inoculated his left eye with a particle of matter, although he had, as he thought, most carefully cleansed his hands. A destructive inflammation followed, endangering his life and resulting in a total loss of sight in the affected eye, the right one being with great difficulty saved. This only illustrates the dangers and risks to which physicians are liable in their practice and for which they receive not the least appreciation, much less compensation.—*Weekly Medical Review.*

Boric Acid and Alcohol in the Treatment of Acne.—Dr. Sarh E. Post states in the *Medical News* that the has had great success in the treatment of acne vulgaris by the use of the following method: The face is bathed at night in hot water containing a few drops of ammonia; no soap is used; it is then rinsed in cold water and dried. The solution is then applied, being sopped on with the corner of the handkerchief, or soft, clean rag. In the morning the solution is again applied, without washing the face, and also several times during the day if the skin becomes moist. In very bad cases it is her custom to apply a little ether and remove the comedones with the extractor at the time of the visit. Within a week great improvement would be obtained. The solution consists of half an ounce of boric acid in eight ounces of alcohol, to which a little perfume may be added, if desired. Unlike most applications to the skin, this forms an elegant toilet preparation.—*Weekly Medical Review.*

An Easy Method for the Removal of Plaster-of-Paris Apparatus.—Dr. C. H. Richardson has used of late a plan in the removal of plaster and starch bandages which seems to do away with the annoyance to the surgeon, and the discomfort, not to say distress, to the patient, attending removal by the shears. It consists simply in the application of a piece of wire under the bandage which is made to cut its way out when removal of the apparatus is desired. The limb is prepared for the bandage in the usual manner, either by the application of the flannel roller or by being well anointed with vaseline. A fine steel wire is then laid the length of the limb, in the situation that it is desired subsequently to cut, and firmly held in that position by an assistant. This is secured by a few turns of the plaster bandage, and the apparatus finished in the ordinary way. The wire should project four or five inches at each end of the bandage, so as to afford sufficient support for a firm hold when the time comes for removal. These free ends of the wire may be bent down after the casing is completed, to prevent the annoyance to the patient which the sharp ends might otherwise produce. When the removal of the appliance is desired, it is necessary to have the patient rest his limb upon a table in order that it may be perfectly steady, and while the lower projecting end of wire is firmly held in place, to prevent its slipping underneath the bandage, the upper end is seized by a pair of pincers and by firm traction is made to cut its way through the whole length of the casing. The apparatus may now be bent back and removed, the operation having caused no discomsort, which can hardly be said of the combined prying and cutting with a pair of plaster shears.—*Medical Record.*

Solvine is the name of a new substance formed by mixing sulphuric acid and castor-oil, removing the excess of acid, dissolving the residue in water, and treating a precipitate, which gradually falls, with a mineral acid. The resultant liquid is of a clear yellow color and of an oleaginous consistence. The substance possesses very marked solvent properties, and passes readily through animal and vegetable membranes, being therefore absorbable by the skin. It is said to dissolve the red blood-globules when injected hypodermically, and is thus not to be regarded as a very safe substance for use in ointments. Indeed, very pronounced toxic symptoms are reported to have followed the application of a solution of naphthol and solvine to the mucous membrane. Berlioz, who presented the substance at a recent meeting of the Therapeutical Society in Paris, proposed to call it sulphoricinic acid.—*Medical Record.*

Cystitis, *Chronic*, *Treatment of.*—H. McGuire, M.D., in *Va. Med. Mo.*—First dilate the urethra and neck of the bladder, paralyzing, for the time, the sphincter; after this, introduce the drainage-tube, and give the organ complete rest.—*Arch. of Gynæcology, etc.*

Ricin.—As obtained from the *Ricinus communis* it is a very poisonous substance, violently irritating, causing erosions and ulcerations to the mucous membrane of the gastro-intestinal tract, when given either by the mouth or intravenously. These erosions are belived by Herr Stillmark to be the result of coagulation of the blood and consequent thrombotic arrests of circulation in the intestinal capillaries. A number of cases of poisoning by ricin are given, and the conclusion reached that poisoning with this impurity in castor-oil is now more frequent than formerly, a conclusion, however, which does not seem to us justified by the apparent increase of the poisoning, said increase being probably due to the great increase of population in civilized countries and to the growing habit of reporting cases.—*Therapeutic Gazette.*

UMBILICAL HERNIA, A SIMPLE METHOD OF TREATING.—J. C. Reeve, M.D., in the *Medical News*, recommends an appliance which fulfills the requirements stated to be essential. It is non-absorbent, non-irritating, and of such material that it will remain in place for at least a week, notwithstanding daily bathing. It is readily attainable everywhere and at all times. I use the large removable head of a common picture-nail. This is applied to the hernia and fixed in place by a strip of adhesive plaster. My first attempt was with the half of a toy marble. The nail-head is better, because larger and less convex.—*Archives of Gynœcology, etc.*

GLONOIN (*Nitro-Glycerine*) *in Puerperal Convulsions.*—Glonoin is sometimes an admirable remedy for puerperal convulsions; the congestive form of eclampsia, that form which is announced by rush of blood to the head, especially if there is albuminuria. The face is bright red and puffed; the pulse full and hard; the patient froths at the mouth; she is unconscious; the hands are clenched, the thumbs being in the palms of the hands.—*Jour. of Obstet.*

[Tincture 1 p. c., beginning with 3 drops, repeated every half hour.]

FORCEPS *and the After-Coming Head.*—Wm. Goodell, M.D., in the *Medical Era*, says the forceps is the only proper aid in the expulsion of the after-coming head. The fingers in the fœtal mouth are useless, and there is danger of breaking the jaw. The body of the child should be held away so that the forceps can be applied to the sides of the head, the handles being on the anterior aspect of the child's body.—*Archives of Gynœcology, etc.*

Good Location *for a Competent Physician.*—A competent physician can hear of a good opening by addressing this Journal.

A Case of Traumatic Tetanus cured by an incision through the old cicatrix, apparently, is reported by Dr. G. H. Stroup in the *University Medical Magazine.*

Turpentine *in After-Pains from Flatus.*—Dr. Fordyce Barker, in *Med. Standard*, claims that after-pains due to flatus are most speedily relieved by turpentine stupes and enemata.—*Archives of Gynæcology, etc.*

Diphtheria *from Cats.*—Four malignant cases occurred in one family. By accident a mother discovered mouth and throat full of membrane. Had it killed, but too late to save herself and three little girls from infection.—*Archives Pediatrics.*

A Novel *Cure for Ingrowing Toe-nails.*—Accurately fit a piece of tin foil between the toe-nail and the flesh. Wear it so daily. Bathe the toe in strong tincture of tannin. A cure is said to follow in a very short time.—*Christiana Journal of Health* for November.

Milk *as a Solvent for Antifebrine.*—A correspondent in the *Medical World* says milk will dissolve antifebrine. It is a good vehicle for antifebrine, but does not dissolve it, as he will find by mixing it with milk and filtering; he will get all his antifebrine on the filter, and spirits nitrous ether will give no color reaction with filtered fluid.

Influenza.—Coryza and soreness of the throat are relieved by spraying the nostril with warm vaseline containing one per cent. of cocaine and one per cent. of carbolic acid, or by the use of the following powder:

℞.—Cocaine muriat	gr. iii.
Bismuth subnit	ʒ i.
Morphiæ sulph	gr. i.
Pulv. acaciæ	ʒ iii.

M. Sig. Use as a snuff.

OBITUARY.

EDWARD CARRINGTON FISHER, M.D.

Dr. Edward Carrington Fisher, the venerable Assistant Superintendent of W. L. Asylum, died there at 10 : 30 p. m. on Sunday last. He had reached his 81st year, and had for some time been in feeble health from the infirmities of age and from physical affliction. He was a native of Richmond; and about forty years ago was a practicing physician in Staunton. He became an assistant physician at the W. L. Asylum with the view of qualifying himself under Stribling for the position of Superintendent of the North Carolina Asylum at Raleigh, which was about to be opened. When it was opened in 1854, he was elected Superintendent of it and organized and conducted it with great ability until the days of Reconstruction came, when he was turned down with all the other Democratic officials of that State. He returned to Virginia, and, aftert he death of Dr. Berkeley, of the Asylum staff, about twenty years ago, was elected to the vacancy. He has been there ever since with the exception of the "Reconstruction" times which visited Virginia in 1881. In 1884 he was restored to his place and remained there. He leaves a brother, Mr. George D. Fisher, in Richmoud, and two sons, George and Charles, who were with him at his death. His remains were taken to Richmond on Monday night, accompanied by Dr. Benjamin Blackford, Superintendent of the Asylum, and Capt. Lewis Harman, Steward. The funeral took place on Tuesday at noon from St. James Episcopal church, of which denomination he had been almost a life-long member.

Dr. Fisher was a man of striking personal appearance, over six feet in height, finely proportioned and with a remarkably handsome face. Even to an advanced age he preserved these attractions to a remarkable degree. But his mental attractions were far superior to even his physical. A fine mind, a sound judgment, a heart kind and considerate for all, the bearing of a thorough gentleman, and all governed by the deepest religious convictions which permeated every act of his daily life, made up a rare and loveable character. The *Richmond Dispatch*, in a notice of his death, fittingly describes his professional standing when it says :

"We were about to say that Dr. Fisher was a celebrated alienist, but we would have done injustice to his memory in applying to him that term, as the world understands it. Dr. Fisher was a native of Richmond, and no man ever lived in Virginia who did more for the insane, both of this State and North Carolina. He was too modest, too loving, too devoted to the unfortunates to be 'celebrated' save among those who saw how he worked with heart and soul in the effort to restore reason and minister to the mind diseased."

The *Richmond State*, in speaking of him, pays the following deserved tribute to his devotion to his duty.

"Tall and commanding in appearance, with clear-cut features and a winning smile, Dr. Fisher was in manner, word and bearing one of the most attractive of men. The ward in the Western Asylum which was under his direction for many years was always to him an object of pride and tender solicitude. The writer has heard him speak fondly of it as if all the personalities of its unhappy inmates were merged in a single creature which was entrusted to his watchful care and was ever present in his mind and partaking of his active sympathies. There was no more humane and skilful physician of the insane in the whole country. He has closed a useful, blameless life."

OFFICIAL PROCEEDINGS BY THE BOARD OF DIRECTORS.

At a meeting of the Board of Directors of the Western Lunatic Asylum on January 15, 1890, the Superintendent read the following paper announcing the death of Dr. Edward C. Fisher, Assistant Superintendent of the Assylum :

Office of Superintendent Western Lunatic Asplum,
Staunton, Va., January 15, 1890.

To the Board of Directors:

Gentlemen:—It is with great sorrow that I have to announce, in my official capacity, to your Board the death of the venerable Dr. E. C. Fisher, the Assistant Superintendent of this Institution.

For over a quarter of a century Dr. Fisher has been connected with the medical department of this Asylum, identifying himself with all its interests with a comprehensivs skill and sagacity and a conscientious fidelity in the dischage of every duty involved, which secured foa him, for those committed to his care, and for this Institution the happiest results. The accuracy and variety of his knowledge, the soundness of his judgment, his long experience and his exact comprehension and appreciation of the needs of the unfortunate insane under his charge, were fully recognized by his associates, who were familiar with his wonderful tact in the management of them.

His inbred sense of honor, his courteous and dignified bearing, and his gentle manner gave him a delightful charm as a companion.

Strong, though not demonstrative, in his feelings, warm in his attachments, he loved this Institution, his friends and his daily associations, and devoted himself to their welfare.

Towards his professional brethren he ever maintained a courteous and modest bearing, and never assumed superiority over the humblest member; ever ready to assist anyone who loved the special science to which he had devoted his life, and tempering all his actions with the gentle graces of the Christian.

During his last sickness he manifested the same traits of character that had distinguished him through life; although he suffered greatly from the disease which was gradually but surely destroying his physical frame, his mental faculties remained clear to the last.

He did not fear death, but, like a Christian philosopher, contemplated his departure with calmness and resignation. Past the boundary of four-score, he has gone to his grave a noble specimen of the courtly "old Virginia gentleman." Let us feel assured he has received the plaudit, "Well done, good and faithful servant."

He died in the communion of the Episcopal Church, to which he was greatly attached, and in the confident hope of a blessed immortality beyond the grave.

BENJAMIN BLACKFORD, Superintendent.

GLYCEROL OF PEPSIN IN VOMITING.—Another agent has been added to the list of "infallible" remedies for vomiting of pregnancy. Dr. W. T. Kohr, of Boston, writes to the *Medical Age* thut, having a case of vomiting in pregnancy, and all other remedies having failed to control, he attained final success by means of glycerol of pepsin.—*Weekly Medical Review.*

READING NOTICES.

A. Page, M.D., Rushmore, O., says: "I have prescribed Aletris Cordial (Rio) in preference to all other similar preparations for a period of two years with no failure in a single instance. I also spoke of its merits in our last meeting of the Northwestern Ohio Medical Assceiation, in a paper which I read before that body. I treated a case of a young lady of twenty-three who had been troubled with excessive menstruation for five years amounting to almost a hemorrhage, at each period, and lasting ten days. Prescribed Aletris Cordial, to be taken in drachm doses four times a day, commencing five days before each period; the first bottle reduced the discharge perceptibly and shortened the duration from ten to six days, ordered to be taken during the interim of the next period, and the result was almost magical, the second period being reduced to four days, which was normal, and the discharge the same. The patient has now been eight months without any treatment, and she, as also myself, considers the case permanently cured.

Warner's Antiseptic Pastilles.—Following a suggestion recently made by Dr. C. Seiler, in the *Medical Record*, Messrs. Wm. R. Warner & Co., the well-known pill and compressed pastille manufacturers, of Philadelphia, are now placing on the market antiseptic pastilles for the the treatment of certain nasal affections. These pastilles are not only powerfully antiseptic and comparatively innocuous, but also distinctly deodorant, as sodium bicarbonate, sodium biborate, sodium benzoate, sodium salicylate, menthol, and oil of wintergreen enter into their composition. One of the pastilles makes two ozs. of a solution or spray for the nostrils, and it is, according to Dr. Seiler, "sufficiently alkaline to dissolve the thickened secretion adhering to the nasal mucous membrane, and as it is of proper density, it is bland and unirritating, leaving a pleasant feeling in the nose. As an antiseptic and deodorizer, it is also far superior to Dobell's solution or any other non-irritating deodorizer and antiseptic." The pastilles are introduced here by Messrs. F. Newbery & Sons, of King Edward St., London, E. C.—*Chemist and Druggist.*

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NORTH CAROLINA MEDICAL JOURNAL.

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MEDICAL JOURNAL.

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ORIGINAL COMMUNICATIONS.

PERNICIOUS VOMITING OF PREGNANCY—REPORT OF CASE, WITH REMARKS.

By J. D. Roberts, M.D., Durham, N. C.

The reflex disorders of pregnancy are many and varied in degree, from slight ailment, for which the physician is not consulted, to serious forms threatening, and often ending in, a fatal termination. Of all these vomiting gives both patient and medical attendant most concern, and the following report of a case, with accompanying remarks, is offered in the hope of interesting and benefiting the profession, and also aid in the efforts made to relieve an unpleasant, and often intractable and dangerous, accompaniment to the parturient state.

Mrs. X., aged 28 years, has been married eleven years, and has given birth to five children, two of whom were born dead at or near term, with one abortion (first pregnancy) at two months. Youngest child now two and one-half years old. She is well formed, robust, general health excellent, now weighs between 150 and 160 pounds. Last menstruation middle of July, clearing off, she thinks, on the 19th or 20th.

Menstrual periods have always been regular, and so far as known has never had any uterine trouble, certainly nothing serious. During former pregnancies she experienced morning sickness with vomiting to some extent for the first three to three and a half months, which was relieved or benefited by the remedies usually given in such cases as ingluvin, bismuth, soda, magnesia, and occasionally carbolic acid, etc.

The middle of August, before she was aware of the fact that she was pregnant, she had a severe tooth-ache with neuralgia. Like Professor Meigs' patient, she says each pregnancy has cost her a tooth.[1] In an effort to extract the tooth it was broken off, and, to relieve the severe pain, ½ gr. sul. morphia was administered. This was followed the next day by nausea, vomiting and constipation, furred tongue, with a severe headache, for which 8 grs. calomel and 15 grs. bi-carb. soda was administered, followed by one-half ounce castor-oil in twelve hours. Twenty-four hours afterwards ptyalism supervened, which was at first thought to be from the calomel, but was in a short while diagnosed as the salivation of pregnancy and the other subjective signs indicating pregnancy.

The stomach soon became very irritable—morning sickness—vomiting to such an extent that even the blandest foods were rejected with rapid emaciation. She was hungry all the time, and every effort was made to find a food that would remain on the stomach, but without success. The treatment was varied, all the remedies usual in such cases being faithfully tried, and in various combinations. Two different trips to the sea-shore were without any appreciable benefit to either the vomiting or the ptyalism.

The tenth week of her pregnancy found the patient very weak, much reduced in flesh, flow from salivary glands, amounting to two or three pints a day, very offensive in odor, at times a troublesome leucorrhœa, severe pains in loins, stomach intolerant of any food whatever, vomiting every hour at least, a glairy mucus, mixed with a greenish-yellow bile, occasionally quantities of blood from the rupture of small vessels of the stomach, diarrhœa, and a quick, wiry pulse. A low form of nervous fever supervened, and the patient's condition appeared critical.

The uterus was examined for malposition, or erosions, but nothing abnormal found. Complete rest in bed had been advised, at first as a trial, and now was carried out from necessity. Nutritive enemas were administered until the rectum would no longer tolerate them Suppositories of chloral, bromides, opium, etc., were given, but with no relief. The os was cauterized with pure carbolic acid, and again with nitrate of silver, with no appreciable benefit.

The history of the case was detailed to a brother practitioner, who commended my treatment, and promised to see the patient with me when I would make the appointment. He was sent for, but not being at home, I failed to get consultation at this stage of the case.

With a full knowledge of the dangers attending the operation, but believing it to be essential to the patient's life, that something should be done at once without waiting for another day. I decided on stretching the os, as advised by Copeman, or even producing abortion, if need be. Dilatation with the finger had been tried earlier in the day, but was not successful. I cannot say why, owing, probably, though, to the strength of the patient not being sufficient to allow time for the operation. Just at sunset, with the patient before a western window, a Cusco's bivalve speculum was introduced, and a pair of ordinary uterine dressing forceps introduced and passed just within the internal os, and the handles then gently, but firmly, opened. A dilator would probably have been better, but were not at hand, and I did not have time to procure them. This procedure gave some pain, and was followed by a few drops of blood. Brom. pot., ʒ ss, chloral hydrate, ℈j, tr. opii., ʒ ss, in mucilage acacia, ℥ j, were thrown up the rectum and retained perhaps twenty minutes. In a half hour the patient sank into a gentle slumber, which lasted three hours, from which she awoke much refreshed. This was the first sleep, except, perhaps, ten or fifteen minutes at a time, she had had for forty-eight hours. She had a fair night's rest, and partook of slight nourishment the next day, with but little discomfort. For four days the symptoms were much better, when they became distressing again, which may have been aggravated by slight errors in diet. A second operation similar to the first gave considerable relief. The irritable condition of the stomach was relieved, being troubled only with a nausea and slight vomiting in the morning part of the day, which persisted almost up to time of delivery. The diarrhœa grew better, though the bowels were disposed to be loose for sixteen months. The fever left her entirely, with but little additional treatment,[2] she grew stronger, but not able to give the usual attention to household duties. The ptyalism grew better, until the fourteenth week she was able to move about the house without carrying a cuspidore with her.

For this trouble many remedies were administered in the early progress of the case, before the stomach became too irritable to retain medicine—chlorate potash, syrup iodide iron, iodide potash, astringent washes and gargles, myrrh, permanganate potash, etc., but with no benefit.

Between the twentieth and twenty-fifth weeks she had gained sufficient strength to visit relatives at a distance; movements of the child are felt but very feebly. Owing, perhaps, to the over-exertion attending the trip, some discomfort was felt in pelvic region; darting pains, very much like labor pains, followed, and she hastened home. The abdomen was but little enlarged, hardly showing pregnancy. Rest, virburnum, morphia, etc., were prescribed, still the labor pains continued, feeble, it is true, but preventing rest and producing in a short while a low, nervous fever, with weak and emaciated condition, diarrhœa and vomiting growing worse, and her condition was again critical. After five weeks from first symptoms of threatened abortion all efforts to prevent delivery were abandoned, and in twelve hours regular labor pains set in, and a small, emaciated, seven months child, weighing three and a quarter pounds, was delivered.

The mother made a fair recovery so far as the first month was concerned, but went through the next eight months with a severe form of watery diarrhœa, mal-assimilation of food, with many of the symptoms of Bright's disease, but with no albumen in the urine. For this state some other factors may have had an influence, notably the drinking of a limestone water, though I attribute most of it to the influence of the pregnancy and its accompanying disorders.

It was necessary to supplement the child's support by artificial means from the beginning, and in a short while it became essential to the mother's safety to take him entirely from the breast. The child did not thrive, was feeble, with a severe indigestion. Wet nurses were employed, various foods and combinations tried, but without any benefit, and his life for months seemed to hang upon a thread.

A change of climate, surroundings, etc., was not only advised, but urged, for the mother had now given up all hope of recovery for either herself or infant. She was barely able to sit up, reduced to a skeleton, weighing now only 90 pounds, mental powers enfeebled, and her friends thought it was a question of but a short while when death would put an end to her sufferings. Nearly all the organs of the body had been affected to some extent in the last sixteen months, and it was only in the possession of a strong constitution that she had been able to bear up under her many ills.

The change was beneficial to the mother, who rapidly improved, but has never fully regained her strength. The menstrual period was established about a year after the birth of the child (she nursed him only four months). Bowels still weak, disposed to run off, and digestion feeble.

For the child the change was not so beneficial, but it was several months before she could be pronounced out of danger. She was very backward in all things, in cutting teeth, sitting up, walking, etc.

I have given this case as succinctly as possible, to convey an adequate conception of it, but it is impossible to put on paper all the details of it, with the dark hours when hope was almost abandoned, the pains and agonies of patient, relatives and a large circle of friends, the responsibilities of my position, for consultation was opposed whenever suggested, with all the attending trials, through the eighteen months of treatment. I rejoice that a woman of exceptionable abilities has been restored to comparative health and strength, to bless a fond husband's heart and aid him in rearing his interesting family of fine girls and boys, as well as adorn the society in which he moves. I rejoice, too, that another life has been saved to this wife and husband in the person of the bright and to them doubly interesting boy, on account of the great suffering through which they have all passed. Still, sitting in my office to-day and calmly reviewing the case, and in the light of the testimony adduced, much of which was referred to and acted upon in the treatment detailed, I can but ask myself the question, Did I not make a serious error in the treatment, in not producing abortion in the tenth week of pregnancy when the patient was so near death's door? It is not permitted us to lift the veil of futurity to know what the days will bring us, and the great suffering before my patient, and the trials could not be seen. Nor could we see the present favorable termination, nor can we now estimate the blessings or perhaps curses in store for her from the babe for which she has suffered so much.

It is true another life has been saved and that the mother still lives, but at what a terrible expense! I do not wish to speak egotistically of my attainments or of my treatment of this case, but will give it as my candid opinion that had this patient been so situated financially or from the long distance from her physician, or any other cause, as not to have been able to secure his services promptly at all times, as well as all the other attentions so necessary in long continued sickness of this kind, she must have inevitably succumbed, probably before the birth of the child, and almost certainly both she and the child would have died had they not had very constant and unremitting care.

Before we decide to produce an abortion, the claims of the fœtus demands our earnest consideration. Its very helplessness should appeal to our sympathies. It is a human being, and as such demands our best efforts for its preservation. Dr. James E. Kelly writes very forcibly on the question of the Ethics of Induced Abortion, condemning in strong terms the readiness with which physicians induce abortion for various conditions assumed to place the mother's life in jeopardy. The editor of the *Annual* summarizes the question thus: "He must perform every just and lawful act which is essential to the life and conducive to the physical welfare of the patient whose care he has undertaken. In the act of abortion he performs an operation which is necessarily destructive of one human life, and, owing to its hazardous nature, most dangerous to another; and possibly, as in cases of multiple conception, the operation may result in the death of three or even a greater number of human beings. He voluntarily undertakes a deed sanctioned by no law, but always regarded as a felony. He constitutes himself the judge of a court from which time admits of no appeal! He ignores that impartiality so essential in an arbiter of life and death, and is simultaneously the judge and counsel for the prosecution! He decides adversely to the accused and condemns him to death! And, lastly, is executioner of his own sentence!"

It is claimed in the same paper that new laws are needed on the subject, on account of the prevalence of abortion, and when it is remembered that nowhere in the United States is it considered anything more than a misdemeanor,[3] and that the punishment is usually very light, we, as the natural guardians of the life and health of the public, should awake to the importance of agitating the question with our law-makers.

The treatment of the vomiting of pregnancy presents many difficulties, and for it there has been more remedies suggested, perhaps, than for any other one symptom, and all text-books treating of the subject acknowledge the fact that cases arise that are only relieved when the fœtus is expelled from the womb. Our treatment is necessarily empirical in very many, we might say in far the larger per cent. of cases, for the causes can be ascertained in but few instances, being generally attributed to reflex action, which is often but hiding our ignorance behind a convenient word or term. This will account, in a measure, for the various plans of treatment of an empirical nature that have been proposed from time to time.

Among the causes given for the vomiting by Churchill,[4] who wrote thirty years ago, are sympathy with, or reflex irritation from, the gravid uterus, temperament, plethoric condition, mechanical pressure, especially in the latter stages of the pregnancy, and quotes other writers as holding that the stomach becomes inflamed, but doubts it himself: abnormal condition of the uterus, reporting one or two cases where, after death, the uterus was found inflamed, walls flacid, parietes soft, exudation of fibrin between the uterus and decidua, and holds "that we may consider it established that the patient may die from aggravated vomiting, without evidence of sufficient organic disease to cause death."

Cazeaux[5] quotes Dr. Bennett as saying that "those gastric disorders and obstinate vomitings which so often bring women to the portals of the tomb, are almost always caused by inflammatory ulcerations of the neck of the womb." For my own part," he adds, "since my attention has been directed to this subject, I have *almost* invariably found ulceration of the neck in cases of this kind." This opinion the eminent French accoucheur does not indorse. While it is certain that ulcerations are often present, and in obstinate cases should be sought for, and that proper treatment of this trouble, if found, will be beneficial, no authority of the present day, so far as I know, holds with Dr. Bennett. Tarnier,[6] speaking of the causes of grave or irrepressible vomiting confesses that we know nothing of its cause.

Hewitt devotes a chapter to the subject, and claims that the cause is to be found in the reflex action of malpositions of the uterus, especially flexions, reasoning that we have vomiting in flexions as well as in pregnancy; that a like cause for the two conditions exists, and that it is the "compression undergone by the uterine tissues (markedly by the nerve-fibers) at the seat of the flexion, which is the cause of the sickness, both in the gravid and non-gravid state"; that, as the patient generally experiences the symptoms in question on first rising from bed, the cause may be found in the body of the uterus falling forward, producing a flexion and consequent compression, and that this occurrence is prevented at three or three and a half months of pregnancy by the uterus being lifted above the brim of the pelvis. In cases where the vomiting still continues he claims "*the tissues of the uterus at the seat of the flexion are sometimes left in a diseased state, being stiffened and unduly resistant, and thus the irritation is kept up.*" He details many cases of vomiting in both parturient and non-parturient women cured by attention to existing flexions by manipulation, position, introduction of pessaries, and lastly, by Copeman's method of dilatation of os, which "is itself the means of righting the uterus." Though the physician may not indorse all that Prof. Hewitt claims for his theory, the chapter is well worthy of consideration, as a close attention to the details has undoubtedly been the means of giving relief to a large number of patients.

I will give only two other ideas advanced as to the cause of vomiting in pregnancy; not for want of others, but because I do not care to unduly lengthen this paper, and these are given more for their novelty than for their utility. Both are taken from the Annual of the Universal Medical Sciences, 1887[7]. Dr. Higgins Higgins says: "After thirty-seven years of active practice I have the first person to prescribe for who was abundantly able to satisfy the desires of a weaker husband"; and he holds that the cause is found in sexual intercourse—the husband too eager for it, the wife too averse, and he would stimulate the wife's passion by cantharides and iron to cure the morning sickness. The editor very justly criticizes this position, and if we find sexual intercourse produces the trouble, which I claim is doubtful, rather prescribe abstinence on the part of the husband as being more worthy of an enlightened human being.

Dr. James Oliver advances the other theory alluded to as follows: "From the earliest period of existence every organism has been endowed with two distinct qualifications: (1) that of maintaining itself; (2) that of perpetuating its species. At first the double function was performed by a uniform mass, free from any semblance of structural differentiation. Habitual localization of function, however, produces eventually a specialization of structure, and with it the evolution of a nerve tract whereby the interdependence is maintained. It is therefore feasible to suppose that the nerve-centre, which regulates the process of assimilation, is either in opposition or at least in direct communication with that which presides over the organs of generation. All the functions are now performed automatically, and are regulated by nerve-centers located in the medulla oblongata, the functions, by inference, being no exceptions. Considering the close relations that exist throughout life between the two processes of assimilation and reproduction, there can be no doubt that the representative nerve-centers act and react upon each other. When the uterus becomes the nidus for a developing germinal mass, the molecular disturbances radiating therefrom to the reproductive center are liable to be transmitted to the pneumogastric as well, and induce either a feeling of nausea or actual emesis Usually, however, in the course of a few months, through habit, the pneumogastric becomes tolerant and symptoms evidencing disturbance disappear." This may be good theorizing, but will fail when put to a practical test, and we can but sum up the whole subject of causes in this, that different factors produce the symptom in different individuals, and that in very many cases they are so obscure as to escape our perception.

As great as the difficulties and differences of opinion on the subject of cause for the vomiting of pregnancy are, the matter of treatment presents greater, and it is not my purpose here to try to enumerate them, but only try to call attention to some of the real advances in treating what is generally termed pernicious, uncontrolable or incoercible vomiting of pregnancy. By these terms are meant, not that the vomiting is not finally controlled, but that it is of an intractable nature, producing symptoms of a grave character, in spite of the remedies usually administered in these cases.

All authorities consulted advise, as a last resort, that abortion should be produced rather than the life of the mother to be sacrificed, and in the reports of many cases given, where death has occurred from the persistence of the vomiting, some even after abortion was produced, regret has been expressed that it was not performed earlier in the progress of the difficulty. All authorities, too, have been loth to advise this procedure, and suggestions thought to meet the difficulties without going to this extent have been made from time to time, but it must be confessed that even now it is occasionally essential to the life of the mother to relieve the womb of its burden.

At present, for severe and protracted vomiting of pregnancy, some mechanical mode of treatment applied directly to the womb offers, seemingly, the only hope we have of successfully combating it. The first of these, I will mention, was brought to the attention of the profession by Dr. Bennett, already alluded to, who, holding that it was from a diseased condition of the uterine neck that the symptoms were caused, treated it with nitrate of silver, but gave the credit of the suggestion to M. Boys de Loury, who advanced the theory fifty years ago. (Unfortunately, I have not a copy of Dr. Bennett's work, and rely on quotations from him by others for his views.) This seems not to have attracted much attention, as we find it reviewed by Drs. Marion Sims and M. O. Jones, in reporting some cases treated by this method as a new one in 1878 or 1880. Cazeaux[8] alluded to the influence of malposition of the uterus as a cause and the necessity for attention to this state, and examination in all cases of incorrigible vomiting, and Grailey Hewitt, in his chapter alluded to, enlarges on the subject very much. Many other writers have advocated this plan, and it is successful in a large number of cases. Perhaps the most decided advancement in the treatment was accidentally discovered in 1875 by Dr. Copeman, of Norwich, England. A paper on the subject was published in the *British Medical Journal*,[9] giving cases treated by the dilatation of the os: "A patient six months pregnant, so reduced by sickness that fears were entertained for her safety. It was resolved to induce premature labor. The cervix was dilated with the finger as a preparatory step. An hour later, when further steps were about to be taken, the patient was so much better that it was thought best to wait. From that time improvement set in, there was no return of sickness, and delivery at full term occurred." He "wondered whether the relief could have been effected by his having dilated the os uteri, and thus removed any undue tension that might be producing sympathetic irritation." In two other cases where dilatation was practiced relief followed. He believes there is in such cases "always some irritating condition present which induces a strain upon the neck of the uterus, or perhaps also on other parts of the uterus." In 1876 Dr. F. J. Bancroft[10] reports a case where a sponge tent was introduced as the first step in inducing premature labor, the sickness ceased as soon as the uterine neck began to expand, the tent was withdrawn and the patient completed her gestation without further trouble. Many other cases followed in quick succession, and now it is recognized as being a valuable aid in the treatment of this trouble.

At first its advocates claimed that nearly, if not quite all, cases could be cured by this procedure, but later developments show that even yet there is occasionally a necessity for going to the extremity of inducing abortion, and then, too, the dangers of the operation in producing abortion, which occasionally happens, are to be taken into consideration. Dr. Johnson reports such a case, and I quote from his paper as to the Copeman theory: "The theory of Copeman that this form of vomiting is produced by the failure of the rigid fibres about the internal os and in the cervix uteri, to soften and dilate under the influence of advancing pregnancy, finds some confirmation in the occurrence of nausea and vomiting, which so frequently occur to women in labor. * * * In that form of dysmenorrhœa, also, where there is a hard, unyielding, narrow cervix, nausea and the most violent and distressing vomiting may precede and accompany the menstrual period."[11]

Hewitt (*loc. cit.*) holds that the tissues around the os are prevented undergoing proper expansion, this impediment being due either to an actual flexion or a contraction and condensation of tissue, the result of a previous flexion. In either case Copeman's method of dilatation cures by reducing the uterine malposition or mechanically overcoming the resistance.

Dr. Copeman used his finger as a dilator, and this is probably best where it can be done, as there is not so much danger of going beyond the internal os. Owing to many circumstances, as an extra rigid os, met with by Hewitt, or from the uterus being too high in the vagina, as detailed by Dr. Johnson, or from the exhausted condition of the patient, as in the case detailed here, it may be imprac ticable, if not quite impossible, to accomplish the dilatation with the finger. In such cases it will be necessary to use an instrument. I used a pair of ordinary long-handled dressing forceps, though they were rather weak. Hewitt has used a pair of throat forceps. Whatever is used, the going beyond the internal os must be guarded against, and undue haste, it should be remembered, is not well. For this reason, if for nothing else, the finger ought to be used when practicable, for we then are compelled to reduce the tension or compression gradually. As to the time at which this procedure should be instituted, the attending physician must be the judge of each indvidual case, taking into consideration the gravity of the symptoms presented, together with the danger of abortion incident to the operation. When there is much emaciation, great distress, and fever supervenes, Tarnier[12] advises abortion, and as the dilatation of the cervix is but one step in this direction, it should not be delayed after these symptoms appear, even if it is so long.

Again, before proceeding to this extremity, the diagnosis of the vomiting being caused by the pregnancy, instead of some intercurrent uterine affection, or perhaps other organic trouble, should be clearly made out. Prof. W. W. Jaggard,[13] of Chicago, gives a very interesting paper on the subject of Endometritis Gravidarum, with pernicious vomiting of pregnancy, detailing a case in which abortion was produced with happy results. This was done both on account of the diseased condition of the uterus and the vomiting.

One or two points in the case given are of interest. The complication of ptyalism with the pernicious vomiting, both resisting every known mode of treatment, the emaciation of the patient, the continuance of the symptoms, to some extent, up to the premature birth of the child, the feebleness of the infant for two years, and the subsequent illness of the mother, are all somewhat unusual, and prom*p*ted my query as to the advisability of producing abortion in the tenth week. In a discussion of the subject before the Boston Gynæcological Society,[14] several members held that it was to the best interest of the mother to produce abortion under similar cir. cumstances to those given here.

Some notice of the ptyalism and our knowledge of its treatment might be interesting, but the length of this paper is already too great to admit of it here.

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1. Meigs, "Woman and Her Diseases." Page 493.

2. Annual Universal Medical Sciences, 1887. Pages 151–152. Extract from *Medical Bulletin.*

3. Journal of the American Medical Association, Vol. IX, p. 164.

4. Churchill on Diseases of Women. Edited by Condie, 1857, p. 495.

5. Cazeaux's Theoretical and Practical Midwifery. Seventh Edition, by Tarnier. (American Edition, 1873.) P. 465.

6. Diseases of Women. By Grailey Hewitt. Birmingham Edition, 1983, Vol. I, p. 391.

7. Annual of the Universal Medical Sciences, 1887, pp. 164–166, and Journal of the American Medical Association, Vol. IX, p. 573.

8. Cazeaux, *log. cit.*, p. 73.

9. Hewitt on Diseases of Women, *log. cit.*, Vol. I, p. 402, and Journal American Medical Association, Vol. VI, p. 286.

10. Richmond and Louisville Medical Journal, Vol. XXI, p. 509.

11. Journal American Medical Association, Vol. VI, p. 284.

12. Cazeaux, *log. cit.*, p. 477.

13. Journal American Medical Association, Vol. XI, p. 289.

14. Journal American Medical Association, Vol. X, p. 117.

SACCHARINE.

By F. P. Venable, Ph.D., F.C.S., Chapel Hill, N. C.

In the year 1878, in the laboratory of the Johns Hopkins University, while Professor Remsen and some of his students were engaged upon researches on the Oxidation of Substitution Products of Aromatic Hydrocarbons, one of them, Constantin Fahlberg, working with Professor Remsen, came upon a compound which they called in their first account of it (Berichte der deutschen chemischen Gesellschaft, 1879, p. 469) anhydroorthosulphaminbenzoic acid. This name they afterwards (*American Chemical Journal*, I., p, 430) shortened to benzoic sulfinide. This particular research had no so-called practical end in view. It was purely scientific in its nature, and there was no dream of the practical application of the new bodies discovered. The sweet taste of this benzoic sulfinide, however, immediately struck the attention of these scientific workers, and in the last paper quoted they report as its most noteworthy characteristic that it "possesses a very marked sweet taste, being much sweeter than cane-sugar. The minutest quantity of the substance, a bit of its powder scarcely visible, if placed upon the tip of the tongue causes a sensation of pleasant sweetness throughout the entire cavity of the mouth. The substance is soluble only to a slight extent in cold water, but if a few drops of the cold, aqueous solution be placed in an ordinary goblet full of water, the latter then tastes like the sweetest syrup."

Without first speaking to his teacher and co-discoverer, Fahlberg had this new disturbance patented in the hope of utilizing its remarkable sweetness, and thus the body became known as Fahlberg's saccharine (its patented name), an evident injustice to Remsen. The name saccharine had already been appropriated to quite a different body prepared from inverted cane-sugar, but it has been usurped by this new product of coal-tar, and it is commonly understood now as meaning the body discovered by Remsen and Fahlberg, the first of the new class of sulfinides.

The method adopted under Remsen's directions for preparing the saccharine was to take ortho-toluol-sulphamide and oxidize it by means of a solution of potassium permanganate. The first substance mentioned was costly and the method yielded only small amounts of saccharine. Both discoverers busied themselves in attempts at improving and cheapening the process, yet it was substantially this process, improved in the details so as to yield much better results, that was afterwards patented by Fahlberg and by Fahlberg and the heirs of Adolph List in Germany. It is interesting to note that the formation of this sulphimide was not the object of the original experiments, but its production came, as a surprise, in the place of a very different expected body. In 1884 we find further improvements in the process patented by Fahlberg. I can find no record of important changes or improvements since.

It was natural that so interesting a body should at once attract attention in the scientific and industrial world, and that numerous attempts should be made at utilizing it. Though the discovery was an American one, Fahlberg transferred the seat of manufacture of saccharine to Germany, and in 1886 a factory was erected in the neighborhood of Magdeburg for its production. It promised to be useful in two directions—in conjunction with foods and with medicines. In the first case it would act as a substitute for cane-sugar, either under circumstances where cane-sugar was injurious, as with those suffering from *diabetes mellitus*, or where the cane-sugar was too expensive and a cheaper sweetening material was desired. In this latter instance it would be mixed with some such substance as glucose, in the proper proportion, to give the sweetness of true sugar. These uses, of course, depended upon the physiological inertness or harmlessness of the saccharine.

With regard to the properties of saccharine, it is a white powder, but little soluble in water, and having a remarkable, extremely sweet taste. It is reported as several hundred times sweeter than cane-sugar. My own experiments go to show that one can barely taste so small a quantity as 3–1000 of a gramme of sugar, while 5–1,000,000 of a gramme of saccharine is still perceptibly sweet. In a concentrated condition the taste is no longer sweet, but on the contrary unpleasant. It does not deteriorate on standing, and so can be kept for a long time. It is an excellent antiseptic, preventing fermentation and decay. Chemically, it belongs to the class of bodies known as imides, being the imide of benzoyl-ortho-sulphonic acid, though, as the first of a new subdivision of imides, it is called a sulfinide, i. e., benzoic sulfinide. The commercial saccharine, however, as sent out from the factory, is very far from being pure benzoic sulfinide. Saccharine is said to be soluble in 330 parts of water, but it is found that for the commercial article sometimes 600 parts of water are necessary, and sometimes as much as 1200 parts. It has been found to contain half its weight of para-sulfanim-benzoic acid. Some observers declare it to be a mixture of sulfinide and ortho-sulfanim-benzoic acid. Others report ortho-sulfo-benzoic and para-sulfanim-benzoic acids. There is, at any rate, always a decided percentage of an acid substance present, which, as will be seen, materially determines the antiseptic power of the substance. Furthermore, this commercial saccharine, on being burned, leaves, beside, from 3 to 6 per cent. of ash, which seems to consist of alkaline carbonates, or calcium carbonate, or sodium sulphate. From the published analyses it is very evident that the substance, as placed on the market, is very far from pure, and, furthermore, that the methods of manufacture must vary, as there is no uniformity nor regularity in the impurities.

As to the physiological action of saccharine there is some divergence of opinion, which may, doubtless, largely be accounted for by the great variation in the composition of the commercial substance. The pure saccharine is capable of exerting a very disturbing influence upon the processes of digestion if used in sufficiently large amounts. Brouardel, Pouchet and Ogier, a committee looking into this question for the sake of public hygiene in France, reported that in the proportion of 1 or 2 to 1000 it hinders the fermentative action of saliva, and in amounts of 2 or 3 to 1000 it inteferes with the gastric action on albuminoids. The action of the pancreas is also retarded. From these facts some maintain that its use should be altogether prohibited, and especially that it should not be used, as is so often recommended, by diabetic patients, for whom a good digestion is so essential. Others say that the amounts entering into use with foods are so small that no effect upon the digestion can be observed, even after prolonged use. It is not one of those substances stored up in the body and so acting cumulatively, but is passed off largely unchanged and mostly within twenty-four hours through the urine. Salkowski (*Virchow's Archiv.*, 5, 46), states that it has been very little or no action on fermentation, and hence is in no wise injurious if the acid present be neutralized, and especially if the sodium salt of saccharine be used. Stevenson and Wooldridge maintain that it is harmless, even in comparatively large doses, and when the use is long-continued. Dujardin-Beaumetz says that it yields good results with diabetic patients, and that it is a question whether one can continue taking it with impunity. Bruylants shows that it is almost entirely carried off by the urine in twenty-four hours. He detected it, also, after a dose of five grams, in large amounts in the milk of a sheep. It seems questionable, therefore, whether it might not prove injurious in the case of a mother suckling an infant. He concludes from his experiments that in the amounts in which it is generally used it cannot be regarded as an antiseptic, and that it has no injurious action, unless there be a possible harmful effect after long-continued use.

Several learned bodies have partly passed upon the danger of its use. The Royal Academy of Medicine in Madrid decided :

1. That it shall be called an adulteration to add saccharine to sugar, glucose, honey, beverages, confectionery or to any food.

2. Such adulteration shall be prevented and punished.

3. The importation of articles of food containing saccharine shall be forbidden.

4. Saccharine must be taxed.

The Belgian Academy, when asked to consider its use as a substitute for sugar, reported :

1. That it is no food, and hence does not represent the food value of sugar.

2. Past experiences show that its use in preparing foods and drinks can have injurious effects upon consumers.

3. That manufacturers and dealers in articles sweetened by saccharine must be compelled to make their use of this substance known.

Of course numerous experiments have been tried upon men and animals, but evidently the ground is not yet fully gone over, and longer usage must decide the extent of the injurious action of this body. One singular circumstance is reported by Berthelot, Liebreich and other observers, and that is that animals show great repugnance to food sweetened with saccharine. Bees, wasps, dogs and cats all readily detect the presence of the saccharine and refuse to touch it. Dogs refuse to lick hands that have been moistened by a solution of saccharine, and not even great hunger can drive cats to partake of their ordinary food sweetened with the same solution. Can this be due to a greatly increased delicacy of taste—so great that the diluted saccharine, though only sweet for us, possesses for them the taste which we perceive only in the concentrated. Or is it the still more acute sense of smell. In many cases the animals seemed to detect the difference between food sweetened with sugar and that sweetened with saccharine by a process of sniffling.

It is a great pity that man is not gifted with a similar delicacy of the senses, as it would save a good deal of trouble in the matter of analysis. A variety of tests have been proposed and are practised for the detection and weighing of the saccharine used in foods, but most of them are too complicated and require too many reagents for ordinary use. The simplest, though only a crude one, is to acidify the substance with dilute sulphuric acid and then shake up with a mixture of ether and petroleum ether in equal parts. After evaporating the solution obtained in this way, the residue is dissolved in a little water and tasted for saccharine. A sweet taste justifies a suspicion of the presence of saccharine.

What are the uses to which this body has already been put? In pharmacy its use must be restricted as it cannot substitute sugar in coatings nor in dilutions, nor do the directions for preparing the saccharine syrup seem to be satisfactory. Patents have been granted for mixing it with quinine and similar bitter alkaloids, but the saccharine is reported as quite incapable of disguising the bitter taste. It is used in medicines for diabetic patients. Its use in wine promises to become extended, as it is not only a sweetening, but a preserving agent. In fruit-acids, liquors, glucose syrup and confectionery it is unquestionably used. Grape-sugar is also sweetened by it up to the standard of cane-sugar, and then used to substitute the latter. Chocolate and cocoa are sweetened by it instead of by sugar. The manufacturers are making every endeavor to extend the use of their product. There is at present but the one factory, already mentioned as being placed near Magdeburg. The daily yield from this one is about 90 pounds, or something less than 30,000 pounds a year, and this corresponds to 15,000,000 pounds of cane-sugar, if we take the proportion given by Fahlberg of 1:500. This is unquestionably a production well worth consideration, but we must bear in mind that to produce this amount this one factory already consumes two-thirds of all the phosphorus made in Germany. Of course more phosphorus can be made, but the extension of this manufacture means a very widespread upheaval and changes among the other industries. For hygienic or financial reasons the various nations have begun to consider the importation of saccharine and its results.

As in many countries an important part of the revenues comes from the tax upon sugar, the question of the evasion of this tax by the use of glucose sweetened with saccharine becomes a serious matter. It is interesting, therefore, to note the position of the various governments toward this American invention which promises to be as fruitful a source of law-making and trouble to Europe as the American hog has been.

Italy first taxed saccharine at the rate of four francs per hundred kilos, and then, as the danger increased, raised this sum to one thousand francs per hundred kilos. Finally. a law has ben proposed prohibiting the importation or manufacture of saccharine or substances containing saccharine, permitting, however, a restricted importation for pharmaceutical purposes. The importation into Portugal, France and Spain is forbidden. At the London Sugar Conference the subject was discussed, but nothing looking to international action done. Great Britain has prohibited the use of saccharine in beer brewing, mainly for financial reasons. Holland looks upon it as a drug, and subjects it to a tax of five per cent. *ad valorem.* As this is very low, it is proposed to increase it to 60 gulden per kilo. Russia classes it with pharmaceutical and chemical preparations, and places a low tax upon it. Belgium collects an import tax of 140 francs per kilo and the same for all articles containing as much as one-half per cent. of it. The United States impose a tax of twenty-five per cent., and in Germany the proposition to tax it has been made.

Though the possible harmful effects of the saccharine are recognized and the fear of them may have aided in securing the passage of such laws, it is mainly as a substitute for sugar that its introduction and manufacture are antagonized. It is feared, then, more from the fiscal than from the sanitary point of view. And yet, unquestionably, this industry, if it continues to grow, will have to be looked into from a sanitary standpoint and brought under government regulation. The danger is from two directions. In the first place, an increased demand for the saccharine, with consequent hurry in manufacture and temptation to adulterate, would most probably lead to the sale of a much impurer article than is now placed on the market. Again, the glucose or starch sugar with which the saccharine is mixed to substitute cane-sugar, is very often carelessly manufactured and injurious to health. Careful government supervision would be necessary to secure a harmless article. With impure saccharine and vile glucose largely used in confectionery, and as a general substitute for cane-sugar with the poorer classes of the community, the danger to public health would be great indeed. Saccharine and its utilization will have to be watched in the future.

DIPHTHERIA AND THE RATIONAL TREATMENT OF IT.

By E. B. Goelet, M.D., Saluda, N. C.

It is well known that diphtheria is a constitutional disease and blood-poison. It is acute, specific and contagious; prevails usually as an epidemic, though sometimes occurs sporadically.

Its causes are common water-supply and bad drainage, seepage and infiltration. Water is contaminated with minute living organisms, and wherever there is heat, filth and moisture, or sewer-gas, fungoid growths will luxuriate. It has been reported from actual experiment that the germ of this disease appears in single organisms and masses itself into colonies in certain parts of the body, and the throat seems to be the point of election for its reproduction.

The symptoms vary from simple sore throat to complete constitutional prostration; usually there is, at first, a malaise or tired feeling, with loss of appetite; next the throat becomes sore, and there is languidness with fever; then the eyes get dull, showing constitutional depression and feebleness. the tonsils are only slightly enlarged out of proportion to the constitutional symptoms; then appears a general redness of the palate, pharynx and tonsils, with dusky reddened blotches and white or ash-colored spots, spreading rapidly and developing in glandular enlargements; the inflamed surface exudes false membranes containing micrococci, which inoculates all other surfaces in contact therewith; and finally the disease expresses itself anywhere on the body—there is an abrasion. If let alone the tendency is to death by suffocation, on account of the spread and rapid growth of these false membranes. The involved cervical glands increase enormously. Blood-clots may form and attach themselves to the valves of the heart, then be swept off as emboli.

Differential Diagnosis.—In tonsilitis there is a sharp attack of fever, high temperature and enlarged tonsils, with no history of malaise, the eyes are bright, there is no languor or prostration, the swelling and redness confined to the tonsils.

Follicular Tonsillitis.—There is no fever, no constitutional depression, but very enlarged tonsils on both sides, covered with patches in the depressions of the tonsils, but these patches are superficial and easily removed; in a day or two, under proper treatment, the patches reduce in size and soon disappear.

Scarlet Fever.—Symptoms resemble diphtheria, but the eruption appears in the first twenty-four hours, the throat symptoms come on later, and the redness is scarlet and diffused.

Diphtheria.—Fever is slight, of low grade, resembling an asthenic type, the eyes are dull, and there is constitutional depression, simple enlargement of the tonsils, inflamed palate and pharynx, with whitish spots or patches appearing upon a reddened base, the spots are adherent and apt to cause a flow of blood when removed, there may be an eruption, but that comes on later; the early symptoms are confined to the throat, the patches spread rapidly and inoculate all surfaces in contact with them.

The treatment should be based upon constitutional theory. A proper germ poison put into the blood will arrest its development and destroy the membrane. Sulphur and chlorine are the most potent germicides known. Now we want to get sulphurous acid into the blood, and in order to do so give the sulphite of sodium, it will not hurt the patient, but will destroy the germ and be excreted by the kidneys as a sulphate—20 to 30 grains every two hours will keep up a continuous action; large doses only act as a purgative and do no harm; as a local application use chlorine water. I usually generate it in this way: Take potass chlorate ʒ ij and hydrochloric acid ♏xx, put into a well-stoppered ℥ viij vial, and when decomposition has taken place, add through a glass funnel glycerine ℥ ij to absorb the chlorine, then water to fill the vial; use this as a gargle, and it will clean off the membrane like a wet sponge does a slate; it can be even given in doses of ʒ i every three hours. As a prophylactic, I prefer the sulphite of sodium, for chlorine is a powerful cardiac stimulant and diuretic and best suited to severe cases. I have had a number of cases this fall and winter and only lost one.

I have a firm conviction that, if called to see the patient in time, with this treatment there should be no fear as to the result.

POTASSII NITRAS IN THE TREATMENT OF CHILL AND FEVER.

By J. D. HUNTER, M.D., New Orleans.

Chill and fever frequently resists the curative influences of quinine and arsenic, tends to become chronic and very protracted, leading to great physical exhaustion and incurable organic lesions.

I have discovered *potassii nitras* is an unusually effective agent in the treatment of chill and fever. To speak summarily, I have during the past five years tested it most fully. At least 65 per cent. of all the cases treated have been cured by the administration of a single dose; 35 per cent. were uninfluenced by repeated doses. The best results were obtained when administered during the premonitory stage, which usually ushered in the chill. Twenty-five or 30 grains given at this period will either abort the chill or materially shorten its duration. The febrile stage is correspondingly shortened or reduced to a minimum. A second dose is seldom required; relapse is infrequent. Recent attacks, as well as protracted conditions, were alike cured by the administration of a single dose, while cases apparently similar, corresponding in character and duration, were not relieved. Other forms of intermittent, not associated with chill, were not benefited in a single instance.

In the employment of *potassii nitras* I have kept the cases treated under close observation, and have observed the greatest accuracy in noting results. At my request a few physicians in the country, where chill and fever prevails extensively, have employed the salt. Their experience was identical with mine as to the unusual rapidity and permanence of cures; the proportion of cures have, however, not quite equalled mine.

That a disorder extending over a protracted period of months or years, characterized by the regular occurrence of periodic malarial paroxysms and presenting the characteristic evidences of chronic malarial poisoning. should be instantaneously cured by the administration of a comparatively infinitesimal quantity of *potassii nitras*, a rapid restoration to health following without subsequent treatment and without relapse, does not accord with our experience in the use of medicine and may justly be held as new and unusual.

I have no theory to offer in explanation of the action of the salt;

to attempt to *render a reason* would be a mere matter of doubtful speculation.

The clinical history and pathological results of the malarial poison have been profoundly studied and most fully elucidated, notably in the great work of Professor Joseph Jones, M.D., of this city, but of the peculiar paroxysmal phenomena arising from the action of the malarial poison in the system our knowledge is merely speculative; many elaborate theories have been offered, but they amount to little more than a plausible hypothesis.

If the malarial poison is an organism are the manifestations in the system—chill and fever, intermittent, remittent, congestive, pernicious, etc., due to the intensity of the cause, degree and rapidity of development and reproduction, or to some modifying property in the system invaded, or are there a variety of organisms, each differing in effect and determining the special result? Scientific research has failed to throw any new light upon the subject. Without positive demonstration the whole matter, in the present state of our knowledge, may be considered as *veiled in profound darkness.*

In order to determine the exact value of *potassii nitras* in the treatment of chill and fever, I would request the profession to give it a full and careful trial and favor us with the result of their experience through this journal or by direct communication.

A large proportion of the morbid conditions of the system which we are called upon to treat, particularly in the Southern States, are directly of malarial origin or are aggravated by a pre-existing malarial cachexia, consequently this subject, more than any other, should enlist the attention of every Southern physician. Professor Joseph Jones, M.D., has given to the profession a work which, both in America and Europe, is held to be the most thorough and complete on this highly important subject. Every physician who practices in a malarial region should possess his volumes and study them carefully.

SELECTED PAPERS.

PODALIC VERSION IN CONTRACTED PELVIS.

By George Tucker Harrison, M.A., M.D.

No physician of large experience in obstetrics, to whose lot it has fallen to be often consulted in cases of narrow pelvis, can fail to have been struck with the hazy ideas the average practitioner possesses with reference to the therapeutical indications in such pathological conditions. As to when forceps, version, craniotomy, the Cæsarean section or the induction of premature labor are indicated, his views are vague and indefinite. This is scarce to be wondered at, seeing that so great a divergence of opinion exists among distinguished authors and teachers regarding the therapeutical doctrines of the narrow pelvis. However little, then, it may be in my power to enlighten this subject and to bring harmony out of discord, still, in view of its surpassing importance, any contribution, no matter how slight, resting upon careful and accurate observation, ought to have its value. The oldest method of delivery in cases of contracted pelvis, when the natural forces were incompetent to surmount the obstacles at the brim, was the dismemberment of the child From several passages in the writings of Celsus it would seem that this celebrated Roman author had knowledge of podalic version, although his experience was doubtless limited. In one place he expresses himself as follows: "*Medico vero propositum est, ut infantem manu dirigat, vel in caput, vel etiam in pedes, si forte aliter compositus est.* It is suggested to the skillful physician to direct the child by the hand into the head or also into the feet (presentation), if by chance it is otherwise situated." In another place he wrote: "*Sed in pedes quoque conversus infans non difficulter extrahitur; quibus apprehensis per ipsas manus commode educitur.* But the child also that has been turned into the feet (presentation) is not extracted with difficulty; when these are seized it is conveniently delivered by the hands themselves." In head presentations, when there were obstacles to the birth, podalic version was practised by the Roman physicians, in proof of which the following language of Philumenos may be cited, as quoted by Zweifel: "*Si caput fœtus locum obstruxerit, ita ut prodire nequeat infans, in pedes vertatur atque educatur.* If the head of the fœtus shall have obstructed the place so that the child is not able to go forwards, let it be turned into the feet presentation and delivered." With the destruction of the Roman empire its literary and scientific knowledge disappeared in the darkness that descended on the nations of Europe. It was therefore an inestimable boon that Ambroise Paré conferred upon humanity when he rescued from oblivion this method and recommended its use as a conservative measure in dystocia from pelvic contraction. In especial honor should the memory of *de la Motte* be held for the zeal and success with which he labored to perfect this procedure in order to avoid a recourse to the barbarous operation then in vogue, when childbirth was difficult, of mutilating the infant by means of the single obstetrical instrument at that time employed, "le crochet." He advised podalic version, even in high degrees of pelvic contraction, as the most successful method for mother and child. As epoch-making must be designated the writings of Sir James Y. Simpson on this theme—possessed of rare logical acumen, profound sagacity and masterly dialectic skill, he brought to its discussion such force and eloquence as to make his arguments invincible. At a meeting of the Obstetric Society of Edinburg, held on the 20th of January, 1847, he had an opportunity of showing to the members a large infant extracted on the previous evening by the operation of turning through a pelvis the brim of which was greatly contracted. The child, to be sure, was born dead, but the fact that the head passed the contracted brim undiminished gave him an incitement to further investigations. After narrating the history of the case, he remarks: "The preceding case was, at the time of its occurrence, one of intense interest to me in two points of view. For, first, it was the first case in which I or any other accoucheur had ever tried the effects of ether inhalation during the labor, and so far it is, I believe, destined to form the commencement of a new and important epoch in obstetric practice. But, secondly, the case appeared to me to be one of great moment as an apposite illustration of views which I had been previously led to entertain, as to the possibility and propriety of substituting, in some instances, extraction by the feet for extraction by the crotchet—the delivery of the infant by the hand of the accoucheur instead of its delivery by instruments—the lateral compression of the child's head by the contracted sides of the pelvis, instead of its more dangerous oblique or longitudinal compression by the long forceps—and, *above all, the transient and not necessarily fatal depression of the flexible skull of the fœtus for the destruction and necessarily deadly perforation of it.*" After discussing, at some length. in his usual felicitous style, the subject of turning in all its bearings, he thus sums up and recapitulates the advantages obtained in contracted states of the pelvic brim by podalic version.

1. The fœtal cranium is of a conical form, enlarging from below upwards, and when the child passes as a footling presentation, the lower and narrower part of the cone-shaped head is generally quite small enough to enter and engage in the contracted pelvic brim.

2. The hold which we have of the protruded body of the child, after its extremities and trunk are born, gives us the power of employing so much extractive force and traction at the engaged fœtal head as to make the elastic sides of the upper and broader portion of the cone (viz., the bi-parietal diameter of the cranium) become compressed, and, if necessary, indented between the opposite parts of the contracted pevic brim to such a degree as to allow the transit of the entire volume of the head.

3. The head, in being dragged downwards into the distorted pelvis, generally arranges itself, or may be artificially adjusted, so that its narrow bi-temporal, instead of its bi-parietal, diameter becomes engaged in the most contracted diameter of the pelvic brim.

4. The arch of the cranium or head is more readily compressed to the flattened form and size required for its passage through a contracted brim by having the compressing power applied, as in footling presentations and extraction, directly to the sides or lateral surfaces, than by having it applied, as in cephalic presentations, partly to the lateral and partly to the upper surfaces of the arch.

5. Lastly, I may add, as a result of the whole mechanism, that the *duration* of the efforts and sufferings of the mother is greatly abridged by turning, when used as an alternative for craniotomy and the long forceps, and that thereby her chances of recovery and safety are increased."

Simpson's teachings met with a hearty reception in Germany, such eminent men as Scanzoni, Hohl and E. Martin contributing to enhance their scientic value. It was, however, mainly due to the brilliant and enthusiastic advocacy of these doctrines by Schrœder and Gusserow that they secured general recognition on the part of German obstetricians. The writings, especially of Schrœder, taking account as they further advanced by Litzmann, illumined this theme by fact and argument, meeting the requirements of strict scientific inquiry. In England, such high authorities as Barnes, Braxton Hicks, Leishman and Duncan employ version to a greater or less extent, while others equally well known give the preference to the high forceps operation.

In France, version has never been a favorite procedure, and especially since the introduction of the Tarnier forceps has it lost ground. Thus Charpentier expresses himself as follows: "Version, even when practiced by a skiiful hand, is always a serious operation, and we cannot better explain the gravity of version than by repeating here the words that we have several times heard pronounced by our Master Depaul: 'With my forceps I am absolutely tranquil, for I am sure of never inflicting an injury, while I never employ version without a certain dread.'"

In this country version has found comparatively few advocates, except within restricted limits. For the value of their contributions, the names of Taylor, Goodell and Lusk are worthy of especial mention. In his excellent text-book the latter has discussed the subject in a spirit of judicial fairness.

In the *American System of Obstetrics* the writer on Version, Dr. Cameron, in the section headed "Forceps vs. Version," speaks as follows: "Except in cases of considerable pelvic contraction, the forceps operation may be regarded as comparatively harmless in skilled hands, while internal version is always a serious undertaking, involving more or less danger for mother and child, even when performed with the greatest skill. The unpracticed operator is far less likely to do harm with the forceps than with version. Whenever, then, it comes to be a question of choosing between forceps and internal version, the forceps should be selected unless specially contra-indicated, because the operation will be easier, and at the same time safer for mother and child." More false doctrine, in my opinion, could hardly be embraced within the same number sentences. Schrœder has shown in the clearest manner that this putting in contrast forceps and version is a glaring error, and ignores true obstetrical relations. When version is still practicable, the forceps is contra-indicated; and when, on the other hand, the forceps is indicated, the time for turning has already passed. As Olshausen expresses it: "The forceps is adapted to the narrow pelvis in general as the fist to the eye, and has already done an immense amount of harm; for example, because many a physician considers the head as already engaged in the pelvis when it is still above the brim."

The objections to the use of the forceps in high-standing head are mainly two-fold; in the first place, the forceps grasps the head in the fronto-occipital diameter, so that the tendency is to enlarge the transverse diameters which have to pass the conjugata, and at the same time to prevent the overriding of one parietal bone over the other; and in the second place, it is not in the power of the forceps to accomplish the inflection of the bones, which is an important factor in the moulding of the head. As Olshausen rightly declares: "The forceps is, even in the hands of the most skillful obstetrician, but a rough instrument in cases of pelvic contraction, and can never substitute the mode of action of good pains. The necessary prerequisite for its application is, therefore, that the disproportion between head and pelvis is already completely or almost equalized; that is, that the head engages with the greater periphery in the brim."

The advocates of podalic version in cases of contracted pelvis are divided into two parties, according as they respectively formulate the therapeutical indications. The one side, in the language of Spiegelberg, recommends "waiting, so long as the passage of the child's head appears possible and devoid of dangerr when further delay is no longer permissible, in the interests of the mother, perforation and extraction with the cranioclast in high-standing head; forceps in the case of a living child, after the narrowed part has been surmounted; in unfavorable engagement at the brim, fixation not ensuing within a certain period, version and extraction." The other side seeks to avoid the possibility of a perforation by a prophylactic version before any symptom of danger threatens the mother. This latter view had its chief exponents in Schrœder and Gusserow. My own practice for years has been based upon it, and I cannot too earnestly enforce the advantages to be derived from its adoption as the rule of practice. Long ago Simpson argued with perfect correctness that the degree of duration and continuance of labor was *per se* dangerous both to the mother and child. and very often fatal in its influence. He insisted, also, that every operation was the more dangerous the greater the length of time from the beginning of birth to the moment of artificial interference; or, as he expresses it: "The operation is dangerous and fatal in proportion to the length of time allowed to elapse before the artificial delivery is practiced." For these reasons he declares that in proportion as turning is practiced earlier, so far will it be attended by greater safety and greater success. The conditions most favorable for version, of course, are intact bag of membranes and completely dilated os uteri; often, however, the physician is not called to the case until the membranes have already ruptured, and this may have occurred prematurely. This premature rupture is especially to be deprecated in a contracted pelvis, as it renders the prognosis for mother and child more unfavorable, the explanation being that such an accident is more apt to occur in an early stage of the labor in a narrow pelvis. I concur fully in the opinion expressed by Nagel in his admirable essay, fortified as it is by careful and exact observations, that in a premature rupture of the bag of membranes version should be undertaken as early as possible, and that we should not wait for full dilatation. I must also heartily agree with this author, as my experience has led me to the same conclusions, when he lays down the rule of practice that in primiparæ, if the head has not entered the pelvis, the os uteri being fully dilated and the membranes intact, or delaying to do this after the rupture of the membranes, we should proceed to the performance of version, no matter whether, in the latter case, the os be completely dilated or not. In multiparæ we can wait somewhat longer, when the course of former births furnishes a hope of a natural birth of a living child. In the case of primiparæ it is necessary, as a rule, to have recourse to version earlier than in multiparous women, as fixation takes place much earlier sooner in the first. To quote the pertinent language of Schrœder: "Since podalic version and extraction in cases of contracted pelvis are especially to be advised in the interests of the mother; since, further, even in very narrow pelvis (almost up to 7 cm.) living children can be extracted; and since perforation of the aftercoming head neither offers much greater difficulties nor more serious dangers for the mother than perforation of the preceding head, version may be recommended up to the limit of absolute pelvic contraction. We will have the pleasure now and then, in a conjugata v. under 8 cm., of delivering a child of medium size, and in the worst case will only have to perforate the after-coming head."

Such has been my experience in a number of cases. Moreover, it occasionally happens that the large diameter of the after-coming head is narrowed by a spoon-shaped impression, and so preforation is avoided.

It is true that we may hope to deliver alive only half of the children thus injured. It is all-important, as influencing the result, that the after-coming head should be brought through the pelvis with as little delay as possible. Upon the best methods of accomplishing this the views of different authorities are at variance. The doctrines taught by Gusserow are in entire harmony with my experience. All are agreed that the head must be guided into the pelvis, and drawn through it with the chin flexed. The finger in the mouth of the child serves mainly to approximate the chin to the breast. A matter of supreme importance is the pressure from without through the abdominal coverings, traction on the trunk being made by the hand over the nape, according to the Veit method. My experience is entirely in accord with that of Nagel when he suggests the propriety of rotating the chin behind, when still in the inlet of the pelvis, so that the sagittal suture runs in one or the other oblique diameter. In this way I have repeatedly accomplished delivery in exceedingly contracted pelves.

This field is a large and fruitful one, and I have only attempted to gather a few of the fruits that hang in rich luxuriance in every part.—*Gaillard's Medical Journal.*

FEVER AND ITS TREATMENT.

By Dr. A. L. LOOMIS, of New York.

Dr. A. L. Loomis read a paper on this subject before the New York Medical Society. His remarks, he said, were intended as suggestive rather than exhaustive. If fever was studied, either from a clinical or pathological standpoint, one soon became convinced that rise of body temperature or an increase or decrease in heat production and heat dissipation were only the appreciable expressions of those processes which attended and depended upon morbid changes in the blood and tissues of the body. These blood and tissue changes were expressed in temperature by a disturbance of the normal ratio between heat production and heat dissipation, and it, as well as the phenomena of fever, were only symptoms of such changes. The prominent factors which determined this ratio were: First, processes of oxidation, which resulted in the production of heat, urea and carbonic acid. In the lighter degrees of fever the elements which underwent oxidation were mainly the excess of nutritive material in the blood, and also of heat stored in the cells. In the more severe forms of fever with higher temperatures, and even in prolonged fevers of low grade, the oxidation took place in the parenchymatous elements of the tissues, resulting in wasting and atrophy. A second factor was the vaso-motor control of the peripheral circulation. In the early stage of fever peripheral circulation was often decreased. and the surface radiation fell below normal. Subsequently vaso-motor dilatation allowed of free circulation and an increased radiation. Activity of the sweat glands was another factor which in some degree determined this ratio. Although heat radiation might be increased even when the skin was dry and the glands inactive, the decrease of surface temperature went on more rapidly when the surface was bathed in perspiration. The marked relief experienced by fever patients when sweating took place had suggested the presence of some other factor than evaporation and heat absorption, and had led to the belief that the febrile poison could be eliminated by a critical sweat. It was more probable that the sweating was the result rather than the cause of the febrile remission. Recent experiments had determined that heat production, as it depended upon oxidation in the tissues and glands, was regulated by a thermogenic center. The exact position of this center had not been definitely settled, but all investigators had agreed in placing it above the medulla, thus distinguishing it from the vaso-motor center. The causes of fever, clinically, might be classed under two heads—the nervous and the hæmic. Under the nervous might be included all those conditions which mechanically affected some portion of the nervous system unassociated with inflammatory changes. The hæmic included all those conditions in which irritating elements were known or supposed to be present in the blood. There were four classes of pyogenic elements which might be regarded as hæmic causes of fever. First, elements developed by perversion in the nutritive processes. This perversion might be in the primary digestion, in secondary metabolism, in retrograde changes, or in excretory functions, and resulted in the production of new and the accumulation of normal poisonous elements in the blood. Second, leucomaines, or those poisons which were developed from inflammatory and exudative products. Third, ptomaines, or the bacterial elements with which they were associated. From recent studies of the subject, the ptomaines developed by bacterial growth had come to be regarded as the cause of infectious fevers, but the exact relation which bacteria and their ptomaines bore to the pathological changes of fever were not definiteiy determined. It seemed probable, however, that in most cases the ptomaine was the active poison, although bacteria penetrated the tissues and were found in the blood and substance of organs. At present we were ignorant of the exact manner in which these poisonous elements excited these metabolic processes which were productive of fever. They might act directly upon the parenchymatous elements of tissues to increase metabolism, or, if all protoplasmic action was under the control of the nervous system, as some supposed, they might, by their actions on the thermogenic centers, either by stimulation or inhibition, excite those metabolic processes in the tissues which resulted in heat production. The general drift of opinion was toward the belief that the pyogenic elements acted primarily on such centres to produce fever. The question was now being asked if all the fevers had not some form of infecting agent as their cause. The experiments of Dr. Roussy, of Paris, had demonstrated that many soluble ferments when introduced into the human organism determined a febrile condition. In all infectious fevers it was a well-established fact that the blood and tissues underwent certain characteristic changes. The fibrin and albumin factors were diminished, the white cells were increased, the corpuscles swollen, crenated, and often broken down. The parenchymatous elements throughout the body suffered varying degrees of cloudy swelling and fatty degeneration. Formerly all these changes were regarded as the direct result of high temperature. Recently it had been satisfactorily demonstrated that they occurred in fevers of low temperatures and that the parenchymatous changes depended upon diminished or perverted nutrition, the result of the excessive metabolism which caused the increased heat. The dangerous effects of high temperatures on the nervous system had, as it seemed, been overestimated. Although it had been determined, both by clinical observation and physiological experiment, that there was a point at which increase of body temperature caused collapse of nerve force and speedy death, such temperatures were seldom reached in fevers. Temperatures of 103° or 104° F. had come to occupy a position of secondary importance with most clinicians. Fever was regarded as a complex process, of which high temperature was a prominent, but not always the most important, feature. Our treatment of fever would vary with our views as to the dangers of high temperatures. Those who believed that all the grave symptoms of febrile conditions were referable to high temperatures would employ antipyretics early and persistently, while those who did not recognize any necessary relation between the temperature range and the other febrile symptoms would resort to these remedies less frequently. If high temperature ranges were readily reduced by mild antipyretic measures, the patient at the same time being much more comfortable, with a decrease in the nervous symptoms, they might be employed with advantage, but when powerful antipyretic remedies had but a temporary effect upon the temperature, and their use was followed by great nervous depression, they were better omitted. In a general way antipyretics might be divided into two classes—the application of cold to the surface, and the internal administration of drugs. A cold bath would often produce a greater and more prolonged reduction of temperature than could be accounted for simply by heat abstraction. This sedative nervous effect was regarded as a far more valuable guide in their use than the effect upon the temperature range alone. When external abstraction of heat was followed by decrease of nervous irritability, as evidenced by decrease of muscular twitchings, cessation of delirium, or the advent of sleep after prolonged wakefulness, one might be assured that the applications were acting remedially, whatever might have been their effect on the temperature. When, on the other hand, the opposite conditions followed with evidences of nervous shock or irritation, no reduction of temperature which they might accomplish could justify the continuance of such measures. Unbiased investigation would justify the statement that while in particular instances cold baths might be advantageously employed for the palliation of certain conditions which we did not know how to abate in other ways, their routine adoption was to be deprecated. In the employment of cold in the antipyretic treatment of fever it should be borne in mind that such treatment was usually directed against only one symptom—high temperature—and on this basis it should never be resorted to unless the temperature range had reached a dangerous point. A temperature of 104° F. might be regarded as the lowest danger point. If the object of its use was simply to abstract heat, cold should never be employed more severely than was necessary to accomplish the desired result. For the past two years the speaker had used, in the treatment of typhoid fever, the cold coil to the abdomen and had not found it necessary to resort to any of the more severe methods for temperature reduction. He believed that the early and constant use of the coil had kept the temperature below the danger point. If the only therapeutic effect of cold baths, employed according to Brandt's method, was the reduction of temperature, this could be successfully combated by other and less troublesome measures. If, on the other hand, the beneficial effect was due to the control which they exercised in the thermogenic and vaso-motor centers, their employment must be advocated on an entirely different basis than the one usually advanced. Internal antipyretics included all those substances which had been found capable of reducing body temperature when taken into the system. It seemed probable that these remedies might be of two classes—those which acted primarily on the thermogenic centers, and those which neutralized or in some manner rendered inert pyogenic substances in the blood. Clinically, we knew that in different conditions different internal antipyretics had unequal therapeutic values. At present antipyrine, antifebrine and phenacetin were the favorites in the specific fevers and conditions where nervous irritation was present and prominent. Quinine was preferable in malarial fevers and in surgical fever attended with suppuration, in septic conditions or simple inflammatory fever. Salol and the salicylates were employed rather for their primary antiseptic action upon the intestinal contents and only secondarily as antipyretics. Opium and sedatives probably acted simply through their effects upon nervous irritation. It should be a rule never to give large doses of any internal antipyretic. The sudden reduction of temperature was liable to be followed by dangerous depression and collapse. Small doses frequently repeated accomplished all that was to be desired. Temperature reduction was not to be attempted unless it exceeded the danger point. In all cases it was more important to watch the effects of antipyretics upon the heart and vaso-motor control of the circulation than upon the temperature range. When either were disturbed by their use they should be discontinued. If the destructive metamorphosis which took place in the tissues of the body in fever was due to the pyogenic substance which produced the fever, and not to the abnormal temperature, it became evident that our duty to the patient could not be discharged by the employment of any measure which was directed to the relief of only one of its symptoms. In the light of those recent experiments which demonstrated that the blood serum was the only operative germicide within the animal organism, and that its germicidal power was in proportion to its vitalizing power, we were forced to the position that in the treatment of all acute infectious diseases our successes would be in the judicious use of those measures which Dr. Chalmers long ago designated as "restoratives." —*New York Medical Journal.*

BLINDNESS FOLLOWING THE USE OF HYDROBROMIDE OF HOMATROPINE.—The *Boston Medical and Surgical Journal* says that Dr. Frederick E. Cheney has reported to the Boston Society for Medical Improvement a unique case of hysterical mydriasis, paralysis of accommodation, and blindness following the topical use of a three per cent. solution of the hydrobromide of homatropine. The patient was decidedly hysterical and the subject of uterine disease. She was treated for some months in private and in hospital, and the lost visual power was gradually recovered.—*New York Medical Journal.*

EDITORIAL.

THE NORTH CAROLINA MEDICAL JOURNAL.

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Thomas F. Wood, M. D., Wilmington, N. C., }
Geo. Gillett Thomas, M. D., " } Editors.

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IN MEMORIAM.

William George Thomas, M.D.

Full of years, at the post of duty, fell our beloved friend, striving with all his earnestness to save the life of another, and the city of his adoption is in mourning, where for nearly a half century he welcomed the infant stranger and soothed the pillow of the dying. Households are in mourning, and grief is abroad in our city, a man has fallen whose noble impress has been stamped upon the community—a good physician has entered into everlasting rest, and amidst the tears for so great a loss arises the thankful triumph that "Death is swallowed up in victory."

Dr. Will. Geo. Thomas was born in Louisburg, N. C., 23d March, 1818, and died in Wilmington on the 18th of February, 1890. He received a common school education at Louisburg, and entered upon the study of medicine in the office of Dr. Wiley Perry, Louisburg. He graduated in 1840 at the University of Pennsylvania at the time when that splendid old school had for its faculty George B. Wood as Professor of Materia Medica and Therapeutics, Nathan Chapman as Professor of Practice, William Gibson as Professor of Surgery, Robert Rogers Professor of Chemistry, and Hodge as Professor of Obstetrics. Impressed with the dignity of his career, inspired by the zeal of his teachers, with a native fund of energy, a strong brain, and an overwhelming sense of honor, he entered upon his profession in his native State at Tarborough. There were two things specially which seemed to predominate among the early objects of his study—the deep impression that he must pursue the investigation of Climatic Diseases, and so supply the lack of knowledge dwelt on by his professor of Materia Medica and Therapeutics, and the neglected study of Obstetrics and Diseases of Women. He did not neglect other branches of his profession, but in these he was assiduous, and in these he excelled. When the writer first obtained personal knowledge of Dr. Thomas (1852) he learned that he was considered an innovator, and his innovation largely consisted in the boldness with which he used quinine, venturing upon five-grain doses two or three hours apart in the period of intermission and remission, and his boldness in the use of obstetrical forceps. These may seem now to be slight things, but climatic fevers were then treated with such small doses of quinine as are now known to be trivial, and the obstetric forceps, when constituting the outfit of the physician, was a reserve power, so sacredly held, and so exceptionally employed, that it was an obsolete instrument.

Dr. Thomas came to Wilmington from Tarborough in 1850. He was then 32 years of age, with a handsome face, a kindly expression, marked physical vigor, attractive as a horseback rider (in which way he then principally visited his patients), he at once took a place in the community. At the bedside his manner was reassuring, pleasant, painstaking, sympathetic. The good of the sufferer was the object of his visit, and the friends of the patient were won by his persistent attention to the smaller details in his behalf.

When the call was made for a Medical Convention for the purpose of forming a State Medical Society, Dr. Thomas responded and became one of the original members. His attachment to the Society was for work, and this distinguished his membership. He was made Secretary in 1856, and continued in this office until 1867, during which time he was the moving spirit in the Society. Once he was chosen its President, but with his accustomed magnanimity he declined in favor of a friend, and he continued to plod on for years for the future welfare of the Society. It was only after the lapse of our civil war, during which time there had been a suspension of the active life of the Society, that he consented to be its President. He presided in Tarborough, where he had spent his early years, and where he was married in 1843. Doubtless it was a proud day for him, for he received an ovation at the hands of his old friends. The Society was then small, but not feeble, although not much given to literary contributions. Dr. Thomas' address was well worthy of the occasion, indicating his freshness and vigor of professional practice, and his knowledge of the scientific current, but his misgivings about his literary ability induced him to withhold his address, and no amount of persuasion could induce him to allow it to be printed.

Dr. Thomas was always a worker. He was willing that his friends, especially his worthy juniors, should have Society promotions, his sole ambition was to see the great undertakings of the profession, especially the Board of Examiners, established upon a sure foundation. His contributions to the literature of medicine are very few, his only lengthy paper being an account of the yellow fever epidemic as it occurred in Wilmington in 1862, in reply to a paper on the same subject by Dr. E. A. Anderson.

When the yellow fever epidemic occurred in Wilmington in 1862 Dr. Thomas had already been in practice here twelve years. It was an ordeal through which none of the resident physicians had ever passed. In the very earliest of it Dr. James H. Dickson had died, Dr. Thomas was taken sick and went to his old home in Louisburg, to recruit, where he had a relapse. From this attack he seemed to have passed from middle to old age by one bound, so feeble was his health for years after, and then he reached a new stage in his life marked by ripened vigor of body and brain.

Among the pioneers in gynecology Dr. Thomas must be rightly numbered. Before Marion Sims had enunciated the methods which formed the foundation of this branch of surgery he had been working in the same direction, and had actually applied the wire suture for the closure of a vesico-vaginal fistula, bringing the local blacksmith into requisition to devise for him a duck-bill speculum; but at the earliest day after Sims had fully demonstrated his processes, Dr. Thomas became a diligent gynecologist, laboring assiduously with patience and zeal among the patients who had already been attracted by his skill.

He was a most earnest patriot. When the alarm of war was sounded and the clash was inevitable, he put all his energies in the preparation of the men for the field, and had it not been for the overwhelming weight of his duty to the sick at home he would have gone to the field. As it was, though, he spent all he had in the fortunes of the Confederacy, beginning the world anew in 1865, with very little more than his profession, but he bravely conquered all difficulties, having always a full practice. Indeed, so large was his practice that he had but little time for any reading but the current medical journals, but in the line of periodical literature he always had the best and in abundance, and for this reason he may be said never to have been an old doctor. The newest and the best he always mastered, and you could always find at the bedside of his patients the most recent of the reputable remedies. His juniors found that in consultation he had no obstinate bias for the obsolete therapeutic legacies of the good old times, nor was he under the dominion of the last book he read, but he preserved that intellectual applomb which made him equal to the task before him.

His marked characteristics were truth and moral courage. His steadfastness for God's revealed Word and for the right made it always sure on which side of every important question he could be found. Exceeding the time allotted to man, maintaining his vigor of body and of mind to the last, in him was fulfilled the Scripture, "Thou shalt come to thy grave in a full age, like as a shock of corn cometh in in his season."

SPECIAL MEETING OF THE WILMINGTON MEDICAL SOCIETY.

TRIBUTE OF RESPECT TO THE MEMORY OF DR. WILLIAM GEORGE THOMAS.

The Wilmington Medical Society, at a special meeting held on the evening of Friday, February 21st, 1890, adopted the following tribute of respect to the memory of their deceased President, as presented by Dr. Thomas F. Wood :

Death has not for a long time visited our profession, and never has it fallen more heavily upon us than in the removal of our late beloved President, Will. Geo. Thomas, M.D. In the full vigor of a ripe and revered manhood, whose lustre had hardly begun to wane, but at a stage of life when decrepitude is the common lot of men, the summons of death found him at his post, pursuing his life-work with almost unabated ardor. For nearly fifty years he has honored his *Alma Mater* by the zeal, honesty and fidelity of his professional work, and nearly forty of these years were spent in this city, where his memory is written on the hearts of two generations in acts of benevolence, in words of tender sympathy, in wise counsel, and the record of his life a blessed bequest to his children and children's children.

The Wilmington Medical Society, in special meeting assembled, hereby desire to bear their tribute to the memory of their lamented President, Dr. Will. Geo. Thomas. As a citizen, he was foremost in all matters appertaining to the public good; to the distressed he was a wise counsellor and helpful friend; to the poor a cheerful giver; to the medical profession an earnest and successful promoter of all that tended to honor and strengthen it. In his intercourse with his brother practitioners he was courteous, tenacious of the truth, considerate of the shortcomings of others and ready to admit his own. He had won the highest positions his colleagues could bestow upon him, and the record of his well-spent life is to us a rich and enduring legacy.

We desire to record by formal resolution—

1st. That, in the death of our President, Dr. Will. Geo. Thomas, a severe affliction has fallen, not only upon this Society, but upon the city in which he labored so faithfully, and upon the whole profession of the State.

2d. That we tender to his bereaved family this expression of our sympathy in this their day of trial and sorrow.

3d. That we inscribe a page to his memory in the records of this Society.

SOME BETTER NEWS ABOUT THE MEDICAL COLLEGES OF BALTIMORE.

Some friend has sent us the following extract from a Baltimore paper. It looks like the efforts of the North Carolina Board of Medical Examiners was about to bear some fruit. We await the fruit :

"The faculties of the medical colleges of Baltimore have decided to make a determined effort to raise the standard of medical education in Baltimore, and to extend their efforts by a concerted move ment to all parts of the United States. Various causes have led to this. A number of States now require a special examination for medical practice within their borders, and in Virginia a number of young men who have graduated from the medical colleges of Baltimore, have not been able to pass State examinations. The Johns Hopkins Hospital influence has been also met in this direction. A majority of the students of the Baltimore medical colleges come from the South. In the furtherance of this movement a meeting of representatives of the medical colleges of Baltimore was held yesterday at noon at the building of the Maryland Historical Society. There were present, Dr. Aaron Friedenwald, chairman; Dr. Eugene F. Cordell, secretary; Drs. Thomas S. Latimer, John S. Blake, H. H. Biedler, R. H. P. Ellis, David Street, Thomas P. Evans, Henry M. Hurd, George H. Rohé, E. R. Walker, Z. K. Wiley, and others, representing the College of Physicians and Surgeons, the Woman's Medical College, the Johns Hopkins Hospital, the Baltimore University and the Baltimore Medical College. One of the objects is to increase the term of study required for a diploma from two to three years. There are two schools in Baltimore—the Woman's Medical College and the Maryland University—

that have already adopted the three years' course, but their assistance is asked in the movement, which is to become national. The object is to form a national convention of schools, all requiring a high standard. and to protect the country from mushroom schools and cheap students. After some little discussion, it was decided to send out to all colleges in the United States a circular calling for a national conference. The circular is signed by all the Maryland schools, and is as follows :

"*To the Medical Colleges of the United States:*

"The following Baltimore medical colleges and the Johns Hopkins Hospital, having met for the consideration of reforms urgently needed in the system of medical education hitherto in operation in this country, after a full discussion of this most important subject, have come to the conclusion that it is not expedient, nor, indeed, practical, for the medical schools of any State to assume alone the responsibility of adopting advanced methods; yet, fully convinced of the pressing need of a change, and earnestly desirous to see it consummated, they are not willing to let matters rest longer as they are, without at least an effort on their part to improve them. They have determined, therefore, to issue this appeal to the medical schools of the United States for their coöperation in inaugurating a national advance. Fully aware of previous ineffectual efforts in this direction, they yet realize that times have greatly changed since these efforts were made, and they believe that a repetition of them at this time would have a good prospect of success. The approaching meeting of the American Medical Association, drawing delegates, as it will, from every part of the country, offers a good opportunity for convening those who are interested in the contemplated change. We therefore invite you to join with us in holding a conference for the full consideration of 'medical education in this country and measures for its improvement,' and we request that you will appoint at your earliest convenience one or more delegates from your faculty to represent it at a meeting to be held at Nashville, Tenn., on the 21st of May, 1890, at 3 p. m. It is requested that delegates should be instructed as far as possible as regards the wishes of their faculties upon the various measures now proposed in connection with advances in medical instruction, in order that definite results may be arrived at with the least possible delay and trouble. The following subjects are considered as most likely to come up for discussion :

"1. Three years' course of six months' sessions.

"2. Graded curriculum.

"3. Written and oral examinations.

"4. Preliminary examination in English.

"Laboratory instructions in chemistry, histology and pathology."

It is not the first time that "national" movements have been made towards the elevation of the standard of medical colleges, and all have been marked by dismal failures. If it is clearly the conviction of the faculties of colleges that they have a standard which is so low that it does not meet the demands of the State Board of Examiners and other tests, why need they delay their movement until it can be made national? The wicked man who can't reform until he sees that all his old associates are going to go with him, must have something else in his mind besides reformation. Some schools in this land of ours have almost been tabooed by Medical Examining Boards. and why they should need further motives to do their duty and take position with reputable schools, is known best to themselves.

THE brain of the insane homicide and suicide, Daley, was found to weigh fifty-nine and one-quarter ounces, and to show no gross pathological lesions. This is just the weight of the murderer Ruloff's brain; an ounce heavier than Jim Fisk's, and six ounces heavier than Daniel Webster's.—*American Practitioner and News.*

CAROTID ANEURISM.—The operation of ligature of the common carotid below the omo-hyoid for aneurism of that vessel was performed by Mr. James Hardie, of Manchester, January 4th, in the case of a gentleman aged forty-five. Up to the present time he has progresed favorably in every respect. We hope to give a full report of the case in due course.—*Lancet.*

REVIEWS AND BOOK NOTICES.

A Practical Treatise on Disease in Children. By Eustace Smith, M.D. London: J. & A. Churchill, 11 New Burlington St., 1889.

It is seldom we see a book as thoroughly revised in its second edition as this. The author says in his preface that the first edition of several thousand has been exhausted, a degree of popularity seldom accorded to medical books of any kind. Since the first edition a number of excellent volumes on the diseases of children have been given to the public, but we doubt if any will receive a more hearty welcome than this. The author, recognizing the fact that he had readers in many countries besides England, has paid attention to their necessities and has brought together just such additions as would make his book useful to all of them.

When a book receives the praise of a reviewer it is quite natural that the reader would like to know the distinctive features which influence his opinion, and this we will attempt to give. One is impressed as he reads the introductory chapter describing the physiological peculiarities of early life, clinical examination of the infant, its feeding and other general subjects, that he not only has positive convictions, but that he has mastered the subject in such a way as to give us a faithful portrait, and that he has ability to convey it in choice language, and so he at once engages the confidence of the reader.

One inconvenience in examination of the chapters is that their captions are not given, one must refer to the contents for this analysis, but it has the advantage of lessening the bulk of the volume. The first chapter is on "Measles," and at once sustains the promise of the author in his preface that he has given special attention to diagnosis and treatment, and while he does not ignore the writings of others, there is no burdening of the pages with quotations and citations and lengthy foot notes. Only ten pages are given to this disease, so succinctly is it written, and the chapter on Epidemic Roseola (a term which he prefers to rötheln or German measles) is compressed into less than two pages, and the description lacks nothing in clinical portraiture.

Instead of a lengthy chapter on Infant Feeding we have the dietary in each disease specially designated with such indications about nursing as seem necessary, a feature of value, especially in this day when we have abundant repetition of the physiology of feeding and culinary science from the prolific press of manufacturers and in nearly every volume on therapeutics and physiology. The bulk of the book, therefore, depends upon the great number of subjects treated, for there seems to be no ailment of any moment left out that would occur to the student of children's diseases in any climate.

If Dr. Charles West gave us the most classical work of his day on diseases of children in England, Dr. Eustace Smith has given us the most thoroughly practical manual for the use of the general practitioner we have seen, and especially this edition is fully abreast of all that may be considered as substantiated in the progress of the medical art.

It may be objected that there are not enough favorite formulæ to aid one in the rapid consultations which a busy doctor must make occasionally in search of what is good for this or that, but the volume presupposes a knowledge of general therapeutics, and the author has shown, very successfully, how to use a few remedies upon sound principles, and so placing the young practitioner, especially, upon the always safe ground.

We are pleased to add this volume to our already large collection of works on this subject, and our thanks are due to the accomplished author for an early opportunity to read his second edition, at the same time commending it to our readers as a faithful clinical guide.

HISTORY AND PATHOLOGY OF VACCINATION. Vol. I. A CRITICAL INQUIRY.

HISTORY AND PATHOLOGY OF VACCINATION. Vol. II. SELECTED ESSAYS. By Edgar M. Crookshank, M.B., Professor Comparative Pathology and Bacteriology, and Fellow of King's College, London. Philadelphia: P. Blakiston Son & Co., 1889.

It is seldom that such sumptuous volumes issue from the press upon any medical subject, but upon such a well worn theme as Vaccination it seemed as if the time had passed when the profession cared enough about it to induce an author to attempt a new presentation of it, and in a style of rare elegance.

The author narrates in his preface that his studies of the communicable diseases of man and the lower animals led him to investigate the history and pathology of cow-pox. the immediate occasion being the outbreak of natural cow-pox. His investigations led him to the conclusion that "the commonly accepted descriptions of the nature and origin of the cow-pox were purely theoretical." In his literary research he found in the Library of the Royal College of Surgeons a manuscript which appeared at first to be the original MS. of Jenner's *Inquiry;* further examination showed it to be a rejected communication from Jenner to the Royal Society, presented in 1796 or early in 1797—*The Inquiry* was published about the end of June, 1798. From these interesting particulars the author was led to some studies which eventuated in the production of a number of new facts, the reproduction and permanent record of some old facts that were getting to be difficult of access, and in independent analysis of the theories of Jenner, which, although not the first of a recent date, still a rare enough exploit from the pen of an English writer. One of the wonders of medical literature is the repetition of errors which have been accepted without question for nearly a century, notably by Englishmen, but also by American encyclopedists and text-book authors, on the natural history and pathology of cow-pox, and the wonder is that so little damage has been done to the cause of vaccination, particularly the perpetuation of a pure and protective stock.

Instead of a portrait of Jenner, the author has given us a very faithful reproduction of the fine, but now rare, mezzotint of Benjamin Jesty, painted by Sharp and engraved by Say, reduced from the original. The occasion of the production of this engraving was probably the investigation by the House of Commons into the claims of Jenner, as the date of this engraving is December 1, 1806. Of this same farmer Jesty it is said on his tombstone, a copy of which is in the possession of this writer, that by the strength of his mind he inoculated his wife and his two sons from the vaccine pock in 1774, the good-natured farmer reserving his own case until he had fully proved its efficacy on his nearest of kin.

The first four chapters treat of small-pox inoculation, recounting the history of it in all foreign countries, its history in Great Britain and Ireland, and specially the operation and treatment of inoculation, and Haygarth's System of the Prevention of Small-pox. This reproduction of the great reputation of the Suttons and Baron Dimsdale as specialists in small-pox inoculation will to the present generation be something new, so far has the practice of inoculation been committed to the realm of the lost arts, but it was really undoubted that some inoculators possessed the art of producing few pustules, and could forecast with some degree of certainty the outcome of a given case. Haygarth, after formulating the principles of infection and contagion of small-pox, suggested that every two years a season be set apart for inoculation, to be made publicly known, and that certain restrictions should be placed upon the practice. To make the regulations more effective he proposed that a plan of rewards should be adopted for those who would comply with all the regulations. It will be remembered that about this time (1778) both Jenner and Waterhouse were small-pox inoculators, and when Haygarth communicated his plan to Waterhouse he ascertained that this practice had been carried out for a long series of years in Rhode Island. All these items are very interesting, but we must pass on to "The Traditions of the Dairymaids." Every student of vaccination history will thank the author for the side-lights he has thrown upon the evolution of the idea of protection secured to the "cow-poxed milkers." The weight of research substantiates the fact that it was inoculation that brought to light the protectivs power exerted upon milkers who caught cow-pox in their hands—the failure to inoculate them with small-pox virus developed the belief as to the source of this immunity. Dr. Lettsom called attention to the fact that twenty years previous to 1801 ("Lettsom's Observations on Cow-Pox, 1801") a woman having had the cow-pox from milking was inoculated by Dr. Archer in London ineffectually. Another case dates as far back as 1771, in which intentional inoculation of cow-pox was done, and the case of Jesty is dated 1774, but it took the brain of Jenner to focus all these ideas into a practical system.

The author explains a point in the history of the claim of Jesty through his friend the Rev. Dr. Bell, showing that it was not a trick of Dr. George Pearson, the rival of Jenner and author of "An Inquiry Concerning the History of Cow-Pox" (1798), but that Dr. Bell's communication was entirely independent of Pearson's. The time has come when we can look these facts plainly in the face and make due allowance for the attitude of Jenner towards his rivals.

"The Life and Letters of Edward Jenner," which forms the subject of the review in the 6th and 7th chapters, are largely drawn from the classical biography of Baron. The story of Jenner's inoculation with small-pox at eight years of age, his fondness for natural history as a school boy, his apprenticeship to eminent practitioners from his 13th to his 19th year, and during his apprenticeship he laid the foundation of his future observations. Jenner had become hypochondriacal, it is said, as a result of his inoculation, but this gradually diminished, and at the age of 21 he became house pupil to John Hunter. It is charming reading to follow the professional friendship of these great men, but it is not possible in the limits of a review to do justice to such a subject. Intercalated in the text the author gives us the colored illustration from the "Inquiry" of the hand of the milkmaid, Sarah Nelmes, from whose hand Jenner drew the first lymph with which to vaccinate James Phipps, on the 14th May, 1796, and this date is that of the demonstration, by the crucial experiment of after inoculation, of the blessing of vaccination.

The author has very generously inserted the *fac simile* of an unpublished letter from Jenner "to Mr. Head, surgeon, Helston Cornwall," of the date March 16, 1810, in which he explains that a certain patient was not vaccinated by him, and that the supposed failure may have come from a lack of knowledge of the true art of making more than one insertion of the matter, so early was it done; and concluding that if this one case was truly a failure, it was insignificant in comparison with the undoubted successes," etc., etc. So Jenner, from beginning to end, had to defend his practice, for he was never willing to admit that re-vaccination could be necessary—once protected always protected—now we know better than the Master.

In the chapter on the Rejected "Inquiry" the author has inserted a *fac simile* of the first MS. folio, which has special interest, being probably the first presentation to the public of this phase of Jenner s career. He ends his analysis of the chapter by saying: "Jenner had made no discovery, but he had carried out an investigation from which he was led to observe a similarity between inoculated cow-pox and inoculated small-pox, and to express a belief in the origin of cow-pox and small-pox, and many other diseases, from horse grease. Apart from these speculations a Dorsetshire surgeon had done almost as much as Jenner. Both had proposed to introduce cow-pox inoculation as a substitute for small-pox inoculation, for which the surgeon was threatened with the loss of his practice, and Jenner with the loss of such scientific credit as he had hitherto possessed."

It was not long after the event of the rejected contribution, that is to say, a year and a little more, that he, nothing daunted by the reverse, presented his "Inquiry" to the world, this time not giving the Royal Society an opportunity to reject it.

In the author's eighth chapter we find for the first time from the pen of an English writer a true critical analysis of the real merits of Jenner's investigation. Doubtless it will to some of the readers in that conservative nation, which gave birth to Jenner, be heretical or iconoclastic, but to those who are searching for truth it opens up lines of thought which may be profitably pursued. It does not seem to this writer, though, that it can be denied that it was the fact set forth in Jenner's "Inquiry" that inaugurated the practice of vaccination. If, as is shown, these "cases are carelessly jumbled together; important details often missing; dates are omitted; facts unfavorable to the project are suppressed; and excuses for failures are ingeniously incorporated," that one spark of truth which lay hidden fanned itself into such a flame that the rate of death from small-pox was greatly reduced, and all this on the basis of Jenner's teaching, admitting the critics view, which we do.

The subject of lymphs, next in order, will be taken up in the April number. T. F. W.

SALOL IN ULCERS OF THE LEG.—Dr. E. Grætzer (*Ther. Monatshefte*, November, 1889) recommends a mixture of salol and starch, 1 to 24, as a dusting-powder for ulcers of the leg. It is applied in a thin layer, and should not be used in greater strength than above. This powder has also proved of value in eczema and burns.—*International Journal of Surgery.*

SOME SURGICAL NOTES FROM THE WILMINGTON MEDICAL SOCIETY.

Dr. Thomas S. Burbank made a verbal report of a case of

PROFUSE URETHRAL HÆMORRHAGE

in a young man suffering from gonorrhœa for which he had been treating himself with potent and popular remedies. Soon after jumping from a carriage one day the patient felt something trickling down his leg, and on getting home discovered that it was blood which was flowing from the meatus. He himself applied ice to the parts and the hæmorrhage ceased, to be followed the next day by a very profuse hæmorrhage, when Dr. B. was called in. On seeing the patient found blood, arterial in character, spouting from the meatus with regular pulsations. The loss had been so great that the patient would pass into syncope if his head was raised. There was great vesical tenesmus. The hæmorrhage was controlled by a pressure pad in the perineum, and there was no return for thirty-six hours, and there was but little fever during that time.

Dr. Burbank being taken sick and another hæmorrhage coming on the next day, Dr. Wood was called to see the patient. He said he had never seen such profuse hæmorrhage from the urethra—that when he arrived there was fully a pound of blood in the vessel. There was again great tenesmus. The bladder was washed out, and for several days the patient passed clots of blood. There was no further trouble from hæmorrhage.

Dr. Wood tested the hæmostatic properties claimed for antipyrin, but the effect of injecting a solution of the drug was nil.

In reply to questions Dr. Burbank stated that there was no ulcer detected at the seat of the hæmorrhage, but a stricture had formed there since. He had not been able to introduce a large sound to obtain pressure, on account of the tenesmus. The injection of a 10 per cent. solution of cocaine had no effect in overcoming this; and he spoke of the unsatisfactory effect of cocaine in his hands in urethral surgery.

Dr. Thomas F. Wood presented a specimen of an

EYE ENUCLEATED BY A STREAM OF WATER FROM A FIRE ENGINE.

The eye was enucleated as neatly as though it had been done by the surgeon's scissors. The optic nerve must have been ruptured about the commissure, judging from the length of that part remaining attached to the ball. The patient stated that he was about five feet from the nozzle when the accident occurred. He was a negro fireman, and he was acting as pipeman during the progress of a fire. He suffered no pain, and when he presented himself the eye was hanging on the cheek, held by a portion of the internal rectus muscle. One sweep of the scissors completed the work of the stream of water, and the patient, on asking the doctor what he was doing, and being told he had taken his eye out, asked: "Well, ain't you goin' to put it back again?"

The surrounding integument was entirely uninjured, and the patient recovered without an untoward symptom.

Dr. W. W. Lane presented the patient on whom he had performed a

PERINEAL SECTION FOLLOWED IMMEDIATELY BY SUPRA-PUBIC CYSTOTOMY IN A CASE OF TRAUMATIC STRICTURE OF THE URETHRA.

A. T. B., a white man, aged 40 years, was admitted into hospital the latter part of November, suffering from traumatic stricture of twelve years standing. While standing on a chair the patient slipped, the back of the chair striking in the perineum, injuring his right testicle, which afterward became completely atrophied. As a result of the injury in the perineum an abscess formed in that region, and, after a free discharge of the contents, an opening was left, which, the patient says, would admit the ends of two fingers. After this wound healed he could feel a hard spot below the scrotum, and he passed his water in a small stream and with increasing difficulty, until the time he was admitted to hospital, when the water came by drops and with considerable suffering.

On examination a hard cartilaginous stricture was found about five and a half inches from the meatus, being of exceedingly small calibre, admitting only a small whalebone filiform guide.

It being determined to make an external section, the patient was etherized and an attempt made to pass the guide; but so much time was consumed in the fruitless effort to pass it, that it was abandoned.

A Wheelhouse grooved staff was then carried down to the face of the stricture, and an opening made into the urethra at this point, being just above the stricture. Up to this point the work went smoothly on, but here an unforeseen difficulty presented itself. A suture was passed through the edges of the incised urethra and served as lateral retractors, the hook of the staff being then turned forward and then used to make traction upward in the superior angle of the wound. It was intended, by thus bringing the face of the stricture into view, to pass a director through the stricture into the bladder, but the instrument failed to find its way into that organ·

Long and continuous efforts were made to reach the bladder by various means by Drs. Carmichael, Wood and Burbank without success; neither could we understand what prevented the passage of the instruments. During these efforts a probe slipped through the roof of the urethra and passed up between the pelvic bone and the bladder wall.

Reluctantly we were compelled to abandon all proceedings in this direction, and resolved to enter the bladder through the supra-pubic region. Accordingly a gum bag was inserted into the rectum and filled with water with the intention of pushing the bladder upwards. An incision was made just above the pubes, and here we found further trouble—the bladder could nowhere be found, until after long and patient search it was discovered some *four or five inches backward from the abdominal wound*, and seemed as if bound down to the sacrum. It was hooked up and an incision made into it, and then Dr. Carmichael succeeded in passing a uterine sound through the urethra from the bladder, the sound coming out at the perineal wound.

The supra-pubic wound was now closed, and a gum catheter introduced through the perineal wound into the bladder, being attached to the sound and following it as it was withdrawn.

The cause of the difficulties here encountered seem to have arisen from the fact that in consequence of the perineal abscess and coexisting inflammation of the pelvic fascia, the bladder end of the urethra was rendered tortuous, and the bladder itself was tied down, as it were, from adhesive inflammation.

A No. 12 E sound can now be passed, and the patient makes his water by natural channel, and is making a good recovery.

Dr . D. A. Carmichael presented a patient on whom he had performed

MCBURNEY'S OPERATION FOR THE RADICAL CURE OF HERNIA.

This man, a negro of about 45 years of age, has had a hernia twenty-two years and for twenty years has worn a truss. On the night of December 30th the hernia came down while the truss had slipped off. The accident had occurred about 10 p. m., and he saw the patient the next morning.

The operation could not be done at the patient's house, and through the courtesy of Dr. W. W. Lane it was done at the City Hospital. It was decided to make a radical operation and so complete it. Decided on McBurney's operation, which simply consists in shortening the peritoneum so there will be no pouching, obliteration of the inguinal canal and healing of the wound by granulation.

The hernia was a congenital one, and the sack was matted to the testicle, which it was found to remove, as it would have been very difficult to have separated them.

The operation was done on the 31st of December and the patient discharged on the 30th of January. He has worn no truss since the operation and attends to his regular business. McBurney claims for his operation the prevention of pouching of the peritoneum by ligaturing high up that it is the only method by which the sac is obliterated, that the walls of the canal are very firmly united throughout the whole length by strong cicatricial tissue, that all risk of abscess and septic complication is reduced to a minimum, and that it is rapid and applicable to all forms of hernia.

After the neck of the sac was ligated with catgut and had slipped back into the abdominal cavity, a violent paroxysm of coughing came on which caused the ligature to slip off with but little trouble, though the peritoneum was caught up and stitched with silk.

The accompanying description of the operation is taken from the "Reference Hand-Book of the Medical Sciences."

McBurney's incision begins a little *outside* of the deep ring, and is carried across the canal, the superficial ring, and a sufficient distance below. Following the method of Riesel, the aponeurosis of the external oblique muscle is cut, beginning at the superficial ring and running parallel with Poupart's ligament and a little above it, up to and slightly beyond the outer border of the deep ring, thereby opening the front of the canal from end to end. This enables the operator to separate the cord from the sac with comparative ease, and the sac from its environment; and these steps should be begun high up and continued downward. It also enables the surgeon to strip with ease and safety the neck of the sac away from the abdominal walls a short distance inside the deep ring; and to tie off the sac higher and more evenly than by any other plan. An autopsy in a case that died from causes foreign to this subject, sometime after being subjected to this operation, should, according to Dr. Abbe, who was present, be a perfectly smooth peritoneum opposite the deep ring, marked by a punctate cicatrix only.

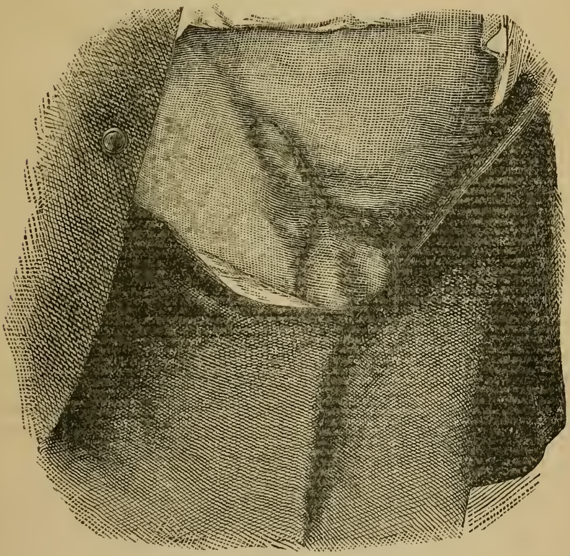
Prior to ligation—which is done with either stout silk or catgut—the sac is opened for examination of its contents; and during ligation it is held vertically while the index-finger of an assistant is kept deeply in its neck to prevent a nipping of the gut or omentum. The ligature is tightened over the tip of his finger, and flush with the general peritoneum, after which the sac is cut away as close to the ligature as safety will permit.

Dr. McBurney believes that a firm, deep and solid cicatrix will offer the greatest resistance to the return of the gut; and, judging by analogy, there is no reason why it should not be permanent when once formed. He makes the two walls of his wound as nearly solid and homogeneous as possible by from four to eight stout catgut or silk stitches placed on each side. These should invert the skin and go through *all* the abdominal layers down to the transversolis fascia, on their own side of the wound. Now, the wound must heal from the bottom. But it is too wide, and therefore two or more heavy sutures are placed across it, drawing the edges so that the average width of the space between the lips of the wound shall be from one-fifth to one-fourth of an inch. These last sutures pass down to, but not through, the abdominal muscles, and are tied over pledgets of iodoform gauze, in order to prevent their cutting. The wound is now irrigated, dusted with iodoform and packed firmly with iodoform gauze to the very bottom. This firm packing prevents an œdema, which otherwise occurs, and interferes with granulation. The scrotal or labial wound is sewn without packing, and may be drained from below if thought advisable.

An ample bichloride gauze dressing is applied and bound securely in place. A large square of rubber tissue, having a hole for the penis in its center, is put in place just beneath the bandage. In women, especially, it is well to catheterize for some days to avoid risk of soiling the wound. In children, for the same reason, a shellac-coated plaster-of-Paris dressing is advisable. The dressing is changed and renewed as before, at the end of five or six days.

The average time required for complete healing is from five to six weeks; at the end of which time the patient will have a very strong cicatrix; hence the delay for this length of time in bed is advantageous, enabling the subject to discard the truss altogether. In fact, Dr. McBurney strongly disapproves of the truss, believing that its constant pressure tends to cause weakness of the scar.

The cut below is from a photograph taken from the patient after recovery.



HYDRASTININE in uterine hæmorrhage is a new remedy mentioned in the *Therapeutic Gazette*. Dr. Falk reports that out of 26 patients treated, 4 were not either improved or cured. Hydrastinine is obtained from hydrastin by gently warming it, diluting with nitric acid, the product precipitated with an alkali, the new base hydrastinine is the result.

CURRENT NOTES.

TRICHNIÆ are not actively affected by freezing.

PROF. GEO. H. ROHE, M.D., has been appointed Health Commissioner of Baltimore. Good!

WE are sorry to learn from the *Sanitary News* that Dr. Rauch has retired from the Illinois Board of Health.

ANTIFEBRIN (Acetanilid) is soluble in concentrated lactic acid, and soluble in weak lactic acid at the boiling point, recrystallizing on cooling.

A PORTRAIT and sketch of the late DR. W. P. MALLETT, of Chapel Hill, appears in Vol. IX., No. 2 of the *University Magazine*, published at Chapel Hill. It is a commendable spirit in that Journal to rescue our worthy dead from the neglect usually shown.

HYPODERMIC SOLUTION OF CAFFEINE:

Benzoate soda	70 grains.
Caffeine	80 "
Water	120 drops.

BI-CHLORIDE OF MERCURY IN INFANTILE DIARRHŒA, by Ringer, and the biniodide of mercury treatment, by Luff, must have some merit. It is given as an antiferment. The biniodide is given in 1-50th grain doses with one grain of chloral hydrate.

POST-PARTUM HÆMORRHAGE, *Iodoform Gauze in.*—O. Piering, M.D., in *Lancet.*—I recommend that, when post-partum hæmorrhage comes on, the bladder should be emptied, and forcible friction, intra-uterine irrigation with hot or cold water, and hypodermatics of ergotin employed; if the hæmorrhage still continues, the cavity of the uterus should be filled with iodoform gauze, the irritation produced by this setting up active and permanent contraction. The method has the advantages of great certainty, complete harmlessness and facility in its performance. In several recent cases it was employed with complete success. In no case was harm done by it. Resort to the plug should not be too long delayed.—*Archi. Pœdiatrics.*

THE Conclusions of Hyderabad Chloroform Commission contain nothing new, merely emphasizing facts which have developed in the practice of chloroform anesthesia. We note, though, that while morphine is considered advantageous injected at the beginning of the administration of the drug, that "atropine has not been shown to do any good, and it may do a great deal of harm."

MALARIAL FEVER, *Influence of on the Puerperium.—Transcaucasian Lying-in Hospital Reports.*—With regard to the influence of malarial fever on the puerperium, Dr. V. E. Krusenstern, of Tiflis, has recently published a paper. His views may be summarized as follows: Malarial fever generally, and in its remittent form in particular, does not retard the post-partum involution of the uterus. He states that in cases where women have suffered from malarial fever, the uterus has decreased in size as in normal cases. He thinks that the sub-involution in malarial puerpera women, which has been described by many authors, is due to an intercurrent endometritis complicating the fever, and not to the malarial poison itself. He goes on to state, however, that the malarial poison, if attacking a puerperal woman, affects the mammary secretion, diminishing it most markedly.—*Archiv. Pædiatrics.*

SCARLET FEVER.—J. C. Wilson, M.D., in *The Dixie Doctor.*—1. The treatment of scarlet fever by chloral hydrate, without the use of other drugs, has yielded most satisfactory results. 2. The chief roll of chloral in the treatment of scarlet fever is that of a sedative to the cerebral centers. It appears to antagonize certain exciting toxic principles formed within the organism during the course of the disease. 3. Chloral is also useful on account of its antiseptic properties, (*a*) upon the throat; (*b*) upon the kidneys; (*c*) to a slight extent upon the fluids of the organism at large. It is necessary in this connection to bear in mind the difference between the germicide and the antiseptic influences of drugs. No amount of chloral compatible with the maintenance of life can act within the organism as a germicide. It is assumed that medicinal doses may *tend* to render the fluids of the body antiseptic—that is to say, may *tend* to impair, to some extent, their fitness as culture media for pathogenic bacteria. 4. The elimination of chloral by the kidneys and its diuretic effect render it especially useful in the treatment of scarlet fever. [We have used this method of treatment, and can indorse it as doing all that is claimed and more. Patients do not, as a rule, complain of the taste when it is given as follows :

℞.—Chloral hydrat	ʒ ii.
Aquæ menth. pip	℥ ii,
Syrupi simplicis	℥ i.

M. ft. sol, Sig.—Teaspoonful in a little cold water every 3, 4 or 5 hours for an adult. Double the quantity at bedtime.

A gargle containing chloral, or mopping the throat with a chloral solution, or a solution of biniodide of mercury, one to five hundred, will control the throat symptoms equally as well as the spray. The mop is much more easily used, especially with children, than the atomizer.—Ed.—*Archives Pœdiatrics.*

Concentrated Enemata of Epsom Salts.—Some years ago Dr. Matthew Hay made a series of experiments upon the use of concentrated solutions of magnesium sulphate given by the mouth. He found that they rapidly drew water from the blood into the intestines. Thus, the bowels having been well emptied, he gave three-quarters of an ounce of the salt, and in half an hour (the time of greatest concentration) obtained an increase from 5,000,000 to 6,790,000 blood-corpuscles; that is, of 1,790,000 to the cubic millimetre. This increase was not obtained if the alimentary canal was not emptied, or if a diluted solution was used. He attributed the concentration to the action of the salt in depriving the tissues of water. The experiments of Moreau and Lauder Brunton have also shown that magnesium sulphate has the power of producing copious exudation into the intestines, and that its cathartic action results from this and not from any direct stimulus to peristalsis. Acting upon these observed facts, Dr. T. J. Watkins, of Chicago (*Maryland Medical Journal*), began the use of concentrated solutions of magnesium sulphate in the form of enemata. He employed at first a mixture of two ounces of the sulphate and four ounces of water. For more than a year this solution was used by Dr. Watkins at the Woman's Hospital of the city, and with excellent results. He finds it inuicated not only in constipation, but in serious intestinal obstruction when there is much nausea and vomiting; and after laparotomy, when sepsis and peritonitis threaten to develop. In conditions of acute and chronic pelvic inflammation the very great watery depletion caused by the injections produces favorable effects. In obstructive dysmenorrhœa it may also be used. Dr. Watkins says the advantages of this enema are: 1. Its action is local, producing diffusion. 2. Its action is free and seldom fails. 3. Time of action is short. 4. The bulk is small, causing but very little, if any, discomfort. 5. It is as unirritating as a simple enema. Its certainty of action has become so well recognized in the New York Woman's Hospital that it has been used in nearly all the operative cases as the cathartic preparatory to operation, for the last six months. The following formula is the one now used :

℞.—Magnes. sulph........................ ʒ ij.
Glycerinæ.............................. ℥ j.
Aquæ........................q. s. ad. ℥ iv.
M.

The Malarial Hæmatozoon.—Among those who have contributed to our knowledge of malarial infection the name of Laveran will always be preëminent, notwithstanding the fact that in the bibliography of the subject it has to be sought for among a host of others. A discovery is no sooner announced than it is subjected to the most rigid scrutiny, and perhaps added to or subtracted from until the discoverer may think himself fortunate if the entire credit of his research has not been divided by numerous investigators who have done little more follow in his footsteps. The thoroughness of Laveran's first investigations was such as to preclude them from this fate, and, therefore, the work which they suggested to others was little else than confirmatory. Notwithstanding the almost unique fact of Laveran's undisputed claim to priority in this matter, it is, perhaps, not too much to say that during the last five years many hundreds of medical students have carried away with their diplomas the conviction that their medical teacher who had given such brilliant demonstrations of the *plasmodium malariœ* was the real discoverer of the parasite. Such an error might be due to no actual fault on either side, but solely to the lazy constitution of the average mind, which hates investigation. For such reasons we welcome Laveran's latest communication (*Archives de Médecine expérimentale et d' Anatomie pathologique*, January 1st, 1890), in which he discusses: 1, the nature of the malarial parasite; 2, the manner in which it gives rise to the symptoms of malaria; 3, the technique of its study. The question whether the well-known appearances of malarial blood are due to a single polymorphous parasite he answers in the affirmative, and for the following reasons: First, it is highly improbable that the different symptoms of malarial poisoning could be due to several parasites of different species, for these symptoms are constantly interchanging, while the unity of paludism, both from the clinical and anatomical points of view, is unquestionable. Secondly, since its discovery the malarial organism has been proved to be one of a large family of polymorphous hæmatozia, some of which bear the closest resemblance to it. This is particularly the case with the hæmatozoa of birds, which have been so closely studied by Danilewsky. Laveran was so struck with this resemblance, although he points out certain differences between them, that he endeavored to propagate the plasmodium in the blood of birds, but without success. The following résumé embodies the chief facts concerning the malarial hæmatozoon, and leads irresistibly to the conclusion that it is the morbific agent of paludism in all its varieties: 1. The parasite has been found in all countries in the blood of those affected with the malarial poison, and the numerous descriptions of its appearance are remarkable for their identity. 2. The parasite has never been found in the blood those not affected with the malarial poison. 3. The development of the parasite is intimately connected with the production of melanæmia, which is the characteristic malarial lesion. 4. The salts of quinia cause the parasite to disappear from the blood, and this takes place synchronously with the cessation of the fever. 5. Malarial disease has been transmitted from one person to another by injecting into the veins of a non-malarial individual a small quantity of blood containing the parasite. The mode of life of the malarial organism outside of the human body is as yet unknown, and it seems probable that its aspect under such circumstances is different from that which it presents in the blood of man. It is possible that, in one phase of its existence, it may be the parasite of some other animal or of a plant, and Laveran suggests the possibility that the mosquito may play a rôle in its transmission. The manner in which the hæmatozoon gives rise to the symptoms of malarial poisoning is a qestion of great interest. Laveran believes that its action is both vital and mechanical. In virtue of the former it destroys the red corpuscles, and the extent of this destruction is shown by the anæmia and the accumulation of pigment in the vessels and tissues. The nervous symptoms—such as the chill, fever, headache, etc., are due to irritations of the cerebral nervous system. The failure of all attempts to cultivate the malarial organism has been advanced as an argument against its parasitic nature, but no better success has attended the culture experiments in the case of the filaria sanguinis. The hæmatozoon malariæ does not belong to the class of schizomycetes, and, therefore, it is not surprising that its behavior is different from that of micrococci and bacilli. These are the essential facts concerning the malarial germ as set forth by its discoverer. They are of the greatest practical interest, for already, in numerous instances, the diagnosis of some of the most obscure forms of malarial poisoning has been made by the detection of the parasite which is its constant attendant.—*Medical News.*

Is Influenza Contagious? asks the *British Medical Journal*, February 15, and then relates this incident: A ship stopped at Santander to take a passenger from Madrid, where influenza was raging. All on board had been in perfect health, but four days afterwards the doctor was attacked and ultimately 154 passengers out of 436 had influenza.

Flagellate Plasmoids, according to Professor Klebs of Zürich, were found in the blood during the febrile stage of influenza. These plasmoids are found in the red blood corpuscles of persons having intermittent fever, and was believed to be diagnostic of malarial intermittent fever. Either Professor Klebs is mistaken in his observation, as one writer has suggested, or else this diagnostic distinction no longer holds. It is remarkable that no one else has found these protozoa but Professor Klebs, considering the fact that many microscopes have been busy in the search.

Curetting of Chancroids.—Dr. O. Petersen, of St. Petersburg (*Allg. Wiener Mediz. Zeitung*), has employed the following treatment in 162 cases of chancroids, the average period of healing being eight days. After injecting a 4 per cent. solution of cocaine into the base of the ulcer, he scrapes out the sore thoroughly with a small sharp curette, so as to leave behind a clean surface. Care should be taken that no pockets remain under the excavated margins of the chancroid. After the curetting the ulcer is irrigated with a 2 per cent. solution of carbolic acid or a 1 to 2,000 sublimate solution, and an iodoform dressing applied. No hemorrhage was observed from the scraping, even in cases where the sore was situated on the glans penis.—*International Journal of Surgery.*

ANTISEPTIC VACCINATION.—Mr. John Bark (*Medical News*) suggests the dressing of the vaccine vesicle with a pledget of cotton wet in eucalyptic on the eighth day after tapping it, to prevent erysipelas.

FLINT says: "I have never known a dyspeptic to recover vigorous health who undertook to live after a strictly regulated diet, and I have never known an instance of a healthy person living according to a strict dietetic system who did not become a dyspeptic."—*Buffalo Medical and Surgical Journal.*

HALF a teaspoonful of chloride of ammonium in a goblet of water will almost immediately restore his faculties and powers of locomotion to a man who is helplessly intoxicated. A wine-glassful of strong vinegar will have the same effect, and is frequently resorted to by drunken soldiers to enable them to return steadily to their barracks.—*Cincinnati Lancet-Clinic.*

URAL, A NEW HYPNOTIC.—This body, obtained by dissolving urethane in chloral, presents itself in form of crystals soluble in alcohol; little soluble in water, which volatilizes without decomposing, and is fusible at 106°. It imparts a bitter taste. It does not modify the blood-pressure, and its administration is never followed by accidents. It is prescribed with success in cardiac affections, mental maladies, hysteria, etc.—*The American News and Practitioner.*

EXALGINE (Methyl-Acetanilid), as an analgesic is favorably commented upon by Professor Fraser, of the University of Edinburgh. Exalgine is not an aromatic body, is not soluble in water, but in spirits, takes too large a dose to make it valuable as an antithermic. Beginning with half grain doses, he found that 14 grains could be given in 24 hours and "no disagreeable, much less dangerous, effect was produced by this quantity." In 88 separate administrations of exalgine for pain, 67 were releived.

THE MEDICAL SOCIETY OF NORTH CAROLINA AT OXFORD.

There will be an election of a Board of Examiners to serve six years, at the meeting in **Oxford** on the **27th May**. We learn from Dr. J. M. Hays, Secretary, that ample preparations are being made to accommodate what will probably be the largest gathering of doctors ever seen in this State.

Dr. Hays would like to know the titles of papers to be read before the Society at an early day, that the programme may be arranged.

There is no other excuse for the literary leanness of our Transactions than the indifference or procrastination of members. It would be untrue to say that the medical profession of this State cannot do any better.

* * *

Tannic Acid, 2 parts, gallic acid, 1 part, is the best application, according to Mackenzie, to arrest bleeding after tonsillotomy.

Woodbury says that 10 grs. of the bicarbonate of soda in a half-ounce of an infusion of uva ursi every two hours will relieve acute inflammation of the bladder immediately.—*Cincinnati Lancet-Clinic.*

Menthol in the Vomiting of Pregnancy.—Dr. Weiss advises the administration of menthol in the vomiting of pregnancy, a drug which was first recommended for this condition by Gottschalk. The following is the formula used by Weiss:

℞.—Menthol	15 grains.
Alcohol	5 fluid drams.
Syrup	1 fluid ounce.

M. Sig.—One teaspoonful to be given every hour.—*Therapeutic Monatshefte.*

READING NOTICES.

About one year ago I was called to see a gentleman of this city who for fourteen years had been suffering from frequent (at least weekly) epileptic fits, sometimes severe, sometimes light. I exhausted all the ordinary remedies upon him with but little benefit. Six months since I commenced the use of Peacock's Bromides, and am pleased to say that from the very first day of its use he has not had a single paroxysm, and now feels himself entirely cured.

J. Stinson Harrison, M.D.

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Pepsin Cordial.—The extraordinary delicacy of the digestive ferments causes their administration to be attended with some difficulty. Unless thoroughly familiar with the peculiar conditions under which they operate, and their behavior toward other medicaments used in the treatment of indigestion, there is danger of their being destroyed.

This applies with particular force to pepsin, and it is safe to say that 90 per cent. of the elixirs, wines and essences of this medicament as now supplied to the trade, are either absolutely inert or will become so with the lapse of time—a statement which experience will amply confirm. Messrs. Parke, Davis & Co. have long aimed to prepare a satisfactory liquid vehicle for the presentation of pepsin, but until recently their efforts were not more successful than those of other manufacturers. Now. however, they have prepared in Pepsin Cordial a product which is at once therapeutically active, and absolutely permanent, at the same time elegant in flavor. It is possessed of all the properties peculiar to pepsin; will dissolve egg-albumen or other proteid matter, and curdle milk. It is one-third the strength of saccharated pepsin, and an average dose of the ferment is therefore contained in a comparatively small bulk. A sufficient proportion of aromatics has been added to make it a grateful stimulant to the peptic glands, thus exciting a natural secretion of gastric juice.

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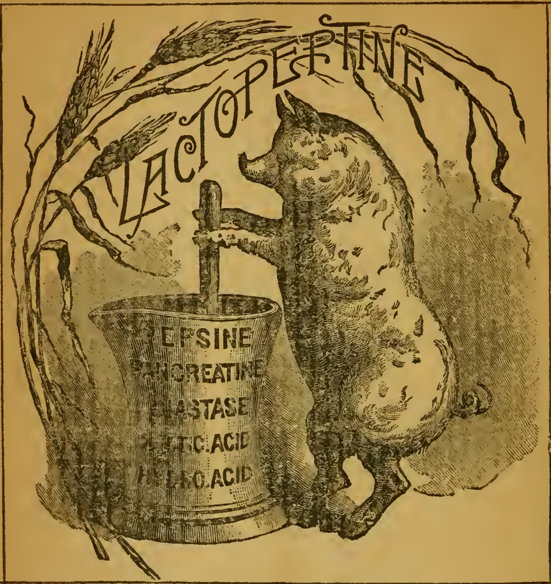

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NORTH CAROLINA MEDICAL JOURNAL.

THOMAS F. WOOD, M. D.,
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NORTH CAROLINA

MEDICAL JOURNAL.

THOMAS F. WOOD, M. D.,
GEO. GILLETT THOMAS, M. D., } **Editors.**

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ORIGINAL COMMUNICATIONS.

SHOULD PENETRATING WOUNDS OF THE CHEST BE CLOSED?

By W. F. Faison, M.D., and C. D. Hill, M.D., Jersey City Hospital.

Eminent authorities all agree that, as a rule, the practice of closing, that is, hermetically sealing, penetrating wounds of the chest, other than clean-cut wounds, should never be resorted to. But are there not some cases in which the surgeon is justifiable in closing such wounds to relieve the urgent symptoms, such as dyspnœa, etc.?

The following is a report of a case in which the wound was closed "hermetically," with most gratifying results:

Matthew Burke, æt. 31, Irishman, of strong build, was admitted to the Hospital December 6th, 1889. While engaged in blowing up an old boiler with dynamite, a fragment of iron, the dimensions of which could not be ascertained, was hurled about an hundred yards, striking him in the back, inflicting a wound, located about one inch above the inferior angle of the left scapula and three inches from the median line of the back. which would admit the tip of the little finger. There had been considerable hemorrhage, both external and internal, probably from wounding one of the intercostal arteries; but which had been controlled by the application of a temporary compress, applied before his admission.

When we saw the patient he was suffering from most agonizing dyspnœa, air, rushing in and out of the wound on inspiration and expiration (traumatopnœa), made a whistling noise which greatly alarmed the patient. Hæmoptysis was not very profuse, though large moist râles could be heard in the throat, from his inability to expectorate the blood. Emphysema was marked on either side, in front, behind and laterally, from the root of the neck to the lumbar region. Shock was not so pronounced as might have been expected, the patient was talking and said: "I would be all right if I could only get my breath." The pulse was exceedingly rapid and thready. On palpation, percussion and auscultation there was every evidence of pneumo-hæmothorax. The lung must have been punctured, for we have the three cardinal symptoms—dyspnœa, emphysema and hæmoptysis, along with considerable ecchymosis of blood in the loins, this latter being a sign considered almost pathognomonic by Valentine of effusion into the pleural cavity.

Something had to be done, and that speedily. Although we are warned not to close penetrating wounds of the chest, yet in this case so urgent were the dyspnœa and every evidence of impending dissolution that we determined to close the wound at once. The nature of the wound and the time involved in such proceeding would not admit of paring the edges and converting the external opening into an incised wound, and drawing it together with sutures; consequently a thorough antiseptic dressing was applied; over this strips of adhesive plaster were placed in a imbricated manner, rendering the wound impervious to air, and around this a roller bandage.

Traumatopnœa ceased, the dyspnœa diminished, and the patient was very much relieved. The following morning temperature was 101.8° F., but the patient's general condition was much more favorable. The breathing was much better, but confined almost entirely to the sound side, the wounded lung being compressed by the effusion of blood in the pleural cavity, as shown by a marked bulging in the intercostal spaces, dulness on percussion, etc.

On December 8th, two days later, the temperature had risen to 103° F. (in rectum), and he complained of "feeling cold," but there had not been a distinct rigor. Now was the trying moment! What should be done? Was the pyrexia an inflammatory fever, due to the absorption of fibrin, a traumatic pleurisy or pneumonia, or was it due to septic infection? If the fever were due to the former causes, then antipyretics were indicated; but if to septic infection—a trouble of a far more formidable nature—then antipyretics plus thorough drainage, which would necessitate opening the wound and inserting a tube. The former mode was adopted and the dressing allowed to remain, with the gratifying result of seeing the temperature gradually decline under the administration of sulphate of quinine in 10-grain doses, repeated every three hours.

On the third day the dressing was removed under a constant stream of bichloride of mercury (1—2000). The wound showed no evidences of a septic trouble, and the opening was completely sealed up. The patient's condition was still favorable—no hæmoptysis, emphysema rapidly disappearing, and the temperature slightly above normal. Another antiseptic dressing was put on, which was allowed to remain for two days. Healthy granulations were now springing up in the wound. From this time onward it was treated as an ordinary granulating surface. Nothing but the most favorable symptoms were manifest until December 24th—some three weeks later—when the patient's temperature suddenly rose to 105° F., accompanied with profuse sweats and a dry hacking cough. But there was no chill. This last rise of temperature at first occasioned grave apprehensions, but, from the fact that "La Grippe" was prevailing in the wards at the time and that the temperature fell, it probably had this for its origin, this being one of the symptoms of certain forms of this peculiar epidemic. From this onward the patient steadily improved, normal resonance returned, except slight dulness at the base of the lung, the effusion into the pleural cavity being absorbed.

The patient was discharged cured February 13th, 1890. As a further evidence to show that our treatment in this case was rational, we will cite two other cases of severe injuries to the chest, involving the lung, but without any external opening.

Case 2.—George Schaffer, æt. 33, an American of magnificent physical development, was admitted to the Hospital January 11th, 1890, about one-half hour after having been run over by a truck weighing 3,500 pounds. Several of the middle ribs were broken on either side, but no external injuries more than slight contusions. The patient was suffering from shock—that "erethistic" form spoken of by Travers as "prostration with excitement." It required several attendants to hold him in bed, notwithstanding the fact that the pulse was almost imperceptible at the wrist, the extremities cold and the skin bathed in a profuse clammy perspiration. Emphysema was marked over the whole of one side. No hæmoptysis, but agonizing pain with marked dyspnœa. The lung was very probably punctured *on one side* by the broken ribs, as emphysema was confined to one side, showing that the air had not escaped from the mediastinum, in which case the emphysema would have made its appearance first at the root of the neck or in the epigastric region, with equal liability to affect both sides.

With hypodermics of morphia and whiskey the urgent symptoms were abridged, and eight days afterwards the patient had sufficiently recovered to be taken home in a coach.

Case 3.—Joseph Schum, æt. 34, German, of fine physique, was admitted to the Hospital November 1, 1889. The wheel of a large beer truck, weighing 8,500 pounds, had passed obliquely across the left chest and clavicle, grazing the side of the neck. The patient was in profound shock, and death seemed imminent. On examining the chest the whole left side, on slightest pressure, caved in. There was a tumor in the axillary region of the size of a large orange, due to extravasation of blood; also considerable ecchymosis extending down to the lumbar region, with hæmoptysis, emphysema and dyspnœa, again showing injury of the lung.

Stimulants were given, and rest in the recumbent posture was all that could be done.

Very much to our surprise reaction soon set in, and the patient made a rapid recovery, being discharged in twenty-six days apparently as well as ever.

In these three cases, above reported, we had every reason to suspect lung injuries, but in the last two, although the injuries *per se* were of a more severe nature, there was no external opening, and consequently no avenues for septic germs; for we know that the air which enters the pleural cavity through a wounded lung (as in Cases 2 and 3) "is rendered aseptic in its passage over the bronchial surfaces, so perfectly is it filtered." Hence in our treatment of Case No. 1, in which there was an external opening, it was our object to prevent, as far as possible, all sources of infection, as well as to relieve the urgent dyspnœa, therefore we sealed the wound hermetically and antiseptically.

GLAUCOMA—WHY A SOLUTION OF ATROPIA SHOULD NOT BE DROPPED INTO THE EYE WHERE GLAUCOMA IS, IN THE LEAST, SUSPECTED.

By C. M. Poole, M.D., Craven, N. C.

Many physicians, we are sorry to say, are in the habit of prescribing a solution of atropia to be dropped into the eye of almost every patient consulting them with a history of pain in the eye, with or without any extreme signs of inflammation.

A large percentage of these cases, when examined closely, are found to be suffering from glaucoma in one of its forms.

There are three forms of glaucoma—simple or non-inflammatory, acute or inflammatory, and the consecutive or secondary form.

The simple form may become chronic and run on for years with but little tension, and consequently but a moderate amount of discomfort to the patient.

The acute or inflammatory form is much more violent in character, a few days or weeks being sufficient, in some cases, to produce total blindness. Von Graefe's *glaucoma fulminans* is said to produce total blindness in a few hours in some instances.

The consecutive form may depend upon any intra-ocular inflammation. Iritis, retinitis, etc., are frequent causes of consecutive glaucoma.

There are several diagnostic signs of glaucoma, the most important of which is increase of tension. This is only to be tested by *tactus eruditus.* Then we have less amplitude of accommodation, due, probably, to anæsthesia, as we have in nearly every case more or less anæsthesia of the cornea and iris.

There is cloudiness of the cornea, and, of course, a certain amount of amblyopia, in some cases complete.

Photophobia is an early and almost constant symptom. Halos around the candle and rapidly increasing presbyopia are prominent symptoms.

Such are the symptoms of glaucoma in general, as seen with the natural eye. With the ophthalmoscope cupping of the papilla is always seen after the disease is well established.

It will be remembered that in the normal and healthy eye there is a constant excretion and reproduction of the intra-ocular fluids, the points of exit being principally by the way of the ligamentum pectinatum and Schlemm's canal. Now, when atropia is dropped into the eye what takes place? The pupil is dilated, there is paresis of the muscles of accommodation. This is more observable in some instances than in others, there being a predisposition in certain cases to yield to the influence of atropia. This paresis is caused by the atropia acting upon the peripheral filaments of the nerves of the iris. It is apparent, therefore, that atropia should not be dropped into any eye unless absolutely necessary, for, as we have seen, the iris retracts, thickens or folds upon itself, and in this way closes up the points of exit for the intra-ocular fluid. When the points of exit are closed the necessary result is increased intra-ocular pressure, and if the atropia be continued for a long time it is sufficient in itself to produce glaucoma. Even if discontinued after having been used for a time, the intra-ocular pressure may have become so great that the iris will be pressed forward against the cornea, and thus the points of exit for the intra-ocular fluid will still be closed. For this reason we believe that much injury is done and that glaucoma is frequently produced by the use of atropia where it otherwise never would have occurred.

As to treatment, iridectomy promises the only permanent relief in a well established case of glaucoma. When taken in time, especially the inflammatory form, there is often prompt and permanent relief. Iridectomy, however, is contraindicated in the other forms.

In the beginning of glaucoma we have one drug in which we may place considerable confidence. We refer to eserine. This remedy will cause contraction of the pupil and lessen intra-ocular pressure. For reasons heretofore stated this is going a long way towards curing glaucoma.

SELECTED PAPERS.

A CLINICAL LECTURE ON THE ANALGESIC ACTION OF METHYL-ACETANILIDE OR EXALGINE.

Delivered at the Royal Infirmary Edinburgh, February, 1890.

By Thomas R. Fraser, M.D., F.R.S., F.R.C.P.E., Professor of Materia Medica and Clinical Medicine in the University of Edinburgh.

Gentlemen:—I intend to-day to depart a little from the kind of subject-matter which supplies the main topics for discussion in this lecture room. At the same time the subject I propose to deal with is one that is obviously and intimately related to our studies in clinical medicine. We cannot, I think, too frequently be reminded that the chief object of these studies is to increase our therapeutic resources; and I do not know that there is any result of disease that more imperatively demands the attention of the physician than the relief or removal of pain. The success with which this can be accomplished may, on the whole, be regarded with complacency, for that success has proved one of the most powerful causes in establishing confidence in the art of medicine, and it has been associated with some of the greatest triumphs in the history of that art.

Restricting attention to pharmacological agents, you are aware that the most important of them are opium and several of its alkaloidal principles, belladonna, stramonium, and other plants yielding atropine-like bodies—aconite, cocaine, bromides and volatile oils; as well as chloroform, ether, chloral, and other general anæsthetics and hypnotics of artificial production. Your pharmacological studies, however, have placed you in a position to appreciate the statement that the success obtainable by the use of these agents is not an altogether unqualified one. In the case of many of them, as of opium and belladonna, the relief of pain, produced by their general action or by their localized action, is accompanied with other effects that are neither desired nor desirable. In the case of others, this relief can be obtained only when they are applied to or near the seat of pain, and this application is often impossible, and is generally attended with some inconvenience. Pain, further, is a sensation which, for its appreciation, does not require that all parts of the cerebro-spinal nervous system, nor even that all the sensory ganglia in the brain, nor all the fibres of a sensory nerve, should be involved. It is equally unnecessary for its removal that change should be produced in more than one or a few of the nerve structures concerned in its manifestation. Restricting attention to that part of its possible appreciation which is brought about by conduction along a sensory nerve, the distinction I am attempting to explain may be rendered more apparent if I remind you that in certain diseases of the nervous system, common or general sensibility may be retained, while in the same region the appreciation of excitations that usually cause pain may be absent; that, in fact, analgesia may be present, while tactile or thermal sensibility is retained. Whether this analgesia be due to a central or a peripheral change, its independent occurrence is significant, for it suggests that a pharmacological modification of a physiological condition, equally with a pathological modification, may remove pain by acting only on the special nerve fibres or on the special centres (hippocampal region of Ferrier) by which painful impressions are conducted or appreciated.

A pharmacological analgesia of this kind, indeed, appears now to be recognized as an effect producible especially by several bodies recently constructed by the chemist, and recently applied to the treatment of disease, and more particularly by many of the bodies included in the aromatic series of the carbon compounds. The salicyl compounds are probably those in which it has first been recognized, although, in all probability, the previously known pain-removing influence of quinine—a natural product in the same chemical series—is of the same kind. The analgesic power of most of the aromatic bodies is, however, only a subsidiary effect, generally overborne by such other effects as the antipyretic, diaphoretic and antiseptic, and producible only by large doses. When used merely as analgesics, they accordingly, like opium and the older pain-movers, have inconveniences, and they, also, are not to be regarded as free from danger in their analgesic applications. The requirements of the therapeutics have not been entirely satisfied by them; for, while they may remove neuralgic pain by an action on pain-conducing or pain-perceiving structures, they cause, when used in the doses required for this purpose, other actions which have nothing to do with the relief of pain, and, besides, are often injurious to the patient. We recognize these disadvantages in antipyrin and antifebrin, probably the most efficient analgesics in this series, for analgesia can rarely be produced by them except with large doses, and, therefore, with the inconveniences and dangers of gastric disturbance, deafness, profuse sweating, disturbance of the circulation, and changes in the blood.

The study of the members of this aromatic series has shown that even slight changes in their chemical constitution may be followed by marked changes in their pharmacological action. Antifebrin illustrates this. It is acetanilide, and when it is combined with methyl, the new body, methyl-acetanilide, is found to be a more powerful analgesic than the acetanilide from which it is derived, and the doses by which pain may be removed by it, are, according to the statements that have been made, too small to produce any of the inconvenient or dangerous effects which may be caused by larger doses.

Methyl-acetanilide or exalgine is one of the four methyl derivatives of acetanilide discovered by Hoffman in 1874—the other three being ortho-, meta- and para-acettoluid. Its formula is C^9H^{11} NO. It is characterized by its complete solubility in benzole, boiling between 80° and 85° C.; by its melting point being between 99° and 100° C.; and by its forming a nearly colorless solution with strong nitric acid, which, when heated, becomes bright yellow, but does not evolve irritating fumes. It occurs in the form of colorless needle-shaped crystals of considerable length, which have a faintly aromatic odor and a slightly pungent taste. It is nearly insoluble in water, but is freely soluble in rectified spirit, and even in dilute alcohol. I find that from 16 to 20 grains may be dissolved in half a drachm of rectified spirit, and that this solution may be diluted with 3 or 4 ounces of water and still remain perfectly clear. As a solution so made, and containing half a grain or 1 grain in a teaspoonful, has but little taste, I have generally used it without the addition of any flavoring agent.

Some of the pharmacological properties of methyl-acetanilide or exalgine were determined by Hepp and Kahn in 1877; but what promises to prove its most valuable action has been made known only within the last few months by Bardet, Gaudineau, Bidet, Dujardin-Beaumetz and Desnos. I shall refer to the results of these observers only so far as to say that methyl-acetanilide or exalgine is not an aromatic body whose antithermic action is likely to prove valuable, as it is producible only by doses which verge on the toxic; but that the analgesic action of exalgine, on the other hand, and in remarkable contrast with the analgesia producible by acetanilide, is manifested by relatively small doses. As the observations I shall bring under your notice have shown, this analgesic action further may be decidedly produced without any other observable effect, unless it be a doubtful tendency to induce sleep, and, therefore, by doses which apparently are absolutely free from danger, and even from inconvenience.

For the opportunity of making the observations I am indebted to MM. Brigonnet and Naville, of Paris, who have paid much attention to the manufacture of methyl-acetanilide, and, judging from the beautiful crystalline specimens they have sent me, have succeeded in producing it in an extremely pure form. My observations have as yet been restricted to the influence it produces on pain.

I have administered it in essential neuralgias, and in pain produced by a number of diseases. Having had no previous personal knowledge of its properties, I have generally given it in the small dose of half a grain; but 1, 2 and 4-grain doses were also administered. The largest quantity given in twenty-four hours was 14 grains, and no disagreeable, much less dangerous, effect was produced by this quantity.

I shall now give a few details of the observations that have been made, commencing with cases of neuralgia:

T. D., aged 30, under treatment for bronchitis, has recently begun to suffer from neuralgia of the right inferior and superior trochlear nerves. The pain is described as "gnawing" and "toothache-like" in character, constant, but with exacerbations of a severe stabbing-sensation during coughing. There is also pain in the right eyeball, and tenderness on pressure over the right supra-orbital foramen.

January 23d.—At 11.30 a. m., gave half a grain of exalgine. Pain soon became less severe, and in one hour it had disappeared, and it remained completely absent for two hours.

January 24th.—At 9 : 30 a. m., while pain was very severe, he received half a grain of exalgine. Within an hour great reduction in pain, but relief not so complete as with the first dose.

January 25th.—Severe pain from 9 : 30 a. m. At 11 : 17 1 grain of exalgine was given. In one hour and ten minutes pain almost completely gone, and relief continued for nine hours.

January 26th.—Severe pain from 9 : 20 a. m. At 11 : 43 1 grain of exalgine was given. In one hour almost no pain, though tenderness on pressure continued. Soon after the latter also disappeared, and there was no return of pain until the following morning.

January 27th.—Severe pain began at 8 : 30 a. m. At 10 : 30 1 grain of exalgine was administered. In half an hour pain, and even tenderness on pressure, had completely disappeared, and they remained absent for twenty hours.

January 28th.—Pain began at 7 a. m., and had become very severe at 8 a. m., when 1 grain of exalgine was given. The pain became much less in one hour, only slight tenderness was present in two hours, and there was neither pain nor tenderness in three hours.

On the 29th, 1 grain produced similar results, but within a shorter period.

On the 30th the pain commenced at 7 a. m. It was very severe at 8 : 20, when a grain of exalgine was given. In thirty minutes the pain had almost completely disappeared; in a few minutes afterwards the patient was asleep, and, when he awoke an hour afterwards, there was no pain nor tenderness. Since this date the patient has remained perfectly free from pain.

In the next case, that of A. T., aged 36, sciatica had been continuously present in the right leg for five months. During eleven weeks of this time he had been under treatment in Stirling Infirmary, where blisters, acupuncture, and several internal remedies had been employed, and had apparently lessened, without removing, the pain. He was admitted into the Edinburgh Royal Infirmary on January 4th, 1890. During the first few days following his admission no treatment for sciatica was adopted, and the pain increased in severity from day to day, so that immediately before using exalgine it was continuous, and of a dull "gnawing" character, but frequent severe paroxysms occurred, with tearing and stabbing sensations; and during the paroxysms, which generally lasted for from one to two hours, the patient moaned and perspired profusely. Exalgine was given on ten occasions during a week, and it is impossible to do more than briefly summarize the results. On each occasion the exalgine was given at the beginning of a severe paroxysm. Half a grain greatly reduced the pain in fifteen minutes, and it remained very slight for one hour and fifteen minutes; half a grain again greatly reduced the pain in fifteen minutes, and it remained very slight for three hours; 1 grain produced only slight relief; 1 grain almost completely removed the pain in forty minutes, and the relief continued for three hours and a half; 1 grain caused great relief in ten minutes, and almost complete removal of pain in thirty-five minutes; 1 grain caused great relief in fifteen minutes, and the pain was almost absent for one hour and ten minutes; 1 grain caused great relief in twenty minutes, after which the patient slept for six hours, and no paroxysm occurred during the three following days; 1 grain caused great relief in thirty minutes, and pain remained absent for eight hours; 1 grain caused great relief in thirty minutes, and pain remained absent for fifteen hours; and on January 21st, 1 grain caused great relief in twenty minutes, and no further paroxysm of pain has since occurred, although some uneasy sensations, not amounting to pain, have at times been felt in the right knee and leg.

In a case of herpes cervico-brachialis ten administrations of exalgine were made during five days. The patient, J. C., aged 35, suffered from continuous neuralgic pain, with exacerbations in severity, in the right interscapular and supra- and infraspinous regions, and extending down the whole of the right arm to the wrist. The pain began seven days before the eruption appeared, and it continued unabated after the appearance of the eruption. Exalgine was usually administered at the beginning of severe exacerbations of pain. Half a grain caused complete relief in ten minutes, which continued for an hour and twenty minutes; half a grain caused complete relief in a few minutes, when the patient fell asleep and slept for three hours; half a grain almost entirely removed the pain in twenty minutes, but the patient slept for only thirty minutes; three-quarters of a grain relieved the pain in a few minutes sufficiently to allow the patient to sleep, and sleep continued for two hours; three-quarters of a grain gave sufficient relief to allow sleep in thirty minutes, and the sleep continued for two hours and a half; half a grain produced only slight relief; half a grain was followed in five minutes by sleep, and the patient awoke one hour afterwards without pain, and no further pain occurred for nine hours; 1 grain caused entire relief in ten minutes, and the pain remained altogether absent for four hours; 1 grain caused entire relief in twenty hours, and the patient then slept for five hours. On awaking slight pain gradually returned, but it was now felt only in the wrist and back of the hand, and the pain did not again anywhere become sufficiently severe to require further administration of exalgine, although the herpetic eruption still continued.

In another case of neuralgic suffering the patient, C. B., aged 45, was recovering from hemiplegia of the right side. The pain affected the right arm, which had only partially recovered its motor power, and especially the neighborhood of the shoulder, elbow and wrist joints, and the whole hand. The pain had been present for a month; it was dull and aching in character, and nearly constantly present, though most severe during the afternoon and evening, and sleep was frequently prevented by it. Eleven administrations of exalgine were made during a period of three weeks. In ten of the administrations the dose was half a grain, and in the eleventh 1 grain. Marked success followed each administration; the pain was removed in from five to twenty-five minutes, and it always remained absent for several hours after each dose, and sometimes for several days. On one occasion, early in the treatment, three doses of half a grain were given at intervals during twelve hours, and, for the first time since the pain began, the patient remained entirely free from pain for twenty-four hours. On another occasion, at about the middle of the period of treatment, no exalgine was given in a day when pain had occurred, and the patient suffered severely in the afternoon, slept only for a short time at night, and had severe pain also during the following morning and forenoon. Since the last administration (January 17th) there has been no return of pain.

I have been anxious to test the analgesic action in the pain of locomotor ataxy, but it has happened that no case of this disease has recently been admitted into my wards. Professor Grainger Stewart has, however, kindly allowed me to make observations on two of his cases. One, A. D., aged 28, has suffered from ataxy for three years. She has frequent pains of the ordinary description in the lower extremities, with girdle sensations there and in the trunk, and she also often suffers from headache. One evening, while these conditions were present, she received 1 grain of exalgine. In twelve minutes the pain in the legs was greatly lessened, and in twenty-five minutes pain had entirely disappeared, the girdle sensations were less marked, and she was free from headache. This relief was maintained for three hours, when the symptoms gradually returned. One hour afterwards, when the symptoms were apparently present in their former severity, another grain of exalgine was administered; in twenty minutes the patient was asleep. She remained asleep for three hours and a half, and, on awaking, she stated that pain was completely absent, although an uneasy heavy sensation, which she nearly constantly experiences, was felt in the back. A third 1-grain dose was given to this patient when she was suffering only from girdle sensations in the back, but only a slight diminution in the sensation appeared to be produced.

The second case of ataxy in which exalgine was given was that of a man, W. L., aged 48, who had suffered from this disease for four years. On the occasion of administration, "gnawing" and "aching" pain was stated to be present in the lumbar region, causing much distress. In fifteen minutes after 2 grains of exalgine had been administered, pain had almost completely disappeared, and soon after the patient was asleep. He slept all night, and had no pain when he awoke next morning.

I have been able to make observations on four patients suffering from toothache. In one patient half a grain gave complete relief on two occasions; in the second patient the same result was obtained, also on two occasions, by 1-grain doses, but the belief lasted for only one and two hours; in the third patient 1 grain completely removed severe pain for twenty minutes, and, on its return, 1 grain followed in twenty-five minutes by 2 grains eased the pain in seven minutes after the second dose, and nearly completely removed it in about eighteen minutes, soon after which time the patient fell asleep, and pain was absent on the following morning; and in the fourth patient, with a number of decayed teeth, only slight relief was produced by a half-grain dose on two occasions.

I have had only one opportunity of testing exalgine in cardiac angina. The patient, J. F., aged 45, suffers from aortic disease. On each of the seven days during which he had been under my care before exalgine was given, severe, sharp, and burning pain had occurred in the pericardium, and pain frequently shoots down the left arm, and is accompanied with a choking sensation in the throat, and with palpitation and much sweating. The attacks usually occur between 6 : 30 and 7 a. m., but they last only from a quarter of an hour to half an hour, and during them the patient is obliged to sit up in bed. The first dose of half a grain was given at 6 a. m.. in order to anticipate an attack, and on that day, for the first time since he had been under observation, he remained entirely free from an attack. The second dose, also of half a grain, was given a few minutes after an attack had commenced; in three minutes he said he was better, and in five minutes that the pain and every symptom had disappeared, and he was now able to lie down.

I have given exalgine in two cases of pleuritic pain. In one, only an imperfect observation was made with a single 1-grain dose; but, on the whole, the evidence led to the conclusion that no relief was obtained. In the second case, in an adult patient, the pleurisy was recent, acute, limited to the right base behind, and accompanied with friction and considerable pyrexia. The pain was so acute that movement was nearly impossible, the chest expansion was almost limited to the left side, and the cough, excited mainly by bronchitis of the left side, was accompanied with a distressing pain in the region of the pleurisy. While these conditions were present half a grain of exalgine was given in the evening. The pain was much relieved in twenty minutes, it had almost disappeared in thirty minutes, and it did not again become severe until two hours and a half. Forty-five minutes thereafter a second dose of half a grain was given; in nine minutes pain had nearly gone; a deep inspiration could easily be taken, and the right arm could be moved without inconvenience. One hour and fifteen minutes afterwards, pain again appeared, and it had become severe in one hour and twenty-five minutes, when it was not relieved by a dose of anodyne cough mixture containing a little opium. A third half-grain dose of exalgine was given three hours and fifteen minutes after the second dose; in ten minutes there was scarcely any pain, and the patient slept for five hours, when he awoke with pain of nearly original severity. A fourth half-grain dose was therefore administered; in four minutes there was almost no pain, in five minutes the right arm could be freely moved about, a deep inspiration could be taken without pain, and the cough was less frequent than it had been. This absence of every painful symptom continued for at least an hour and a half, when other treatment was commenced for the pleuritic inflammation.

I have also administered exalgine in several cases where the pain was not so distinctly of a neuralgic character as in the preceding cases.

Thus, in a case of rheumatic synovitis of one wrist, with intermittent attacks of severe pain occurring each evening, and lasting for from an hour and a half to two hours, on one occasion, half a grain of exalgine relieved the pain in forty minutes and for half an hour; on a second occasion, in half an hour, and for a whole night; on a third occasion, the same dose produced no marked effect until fifty minutes, when the pain suddenly disappeared, and remained absent during a whole night, a sudden cessation having never previously occurred; and on a fourth occasion, half a grain caused complete removal of pain in twenty minutes, which was maintained all night; and, indeed, after this dose no further pain has occurred of sufficient severity to require special treatment.

In a case of blenorrhagic arthritis with severe continuous pain in both knee-joints, and much swelling there, the pain was much relieved in ten minutes by 1 grain, and for two hours; but on a second occasion, 2 grains produced only slight relief, which, although apparently sufficient to allow the patient to fall asleep in twenty minutes, did not last long, as the sleep was soon interrupted by a return of the pain.

In each of these two cases, even when marked relief from pain was obtained, no effect seemed to be produced on the tender condition of the joints.

In two cases of gastric pain, due to organic disease of the stomach, exalgine was found to give a certain amount of relief.

In the first, that of a woman, J. H., aged 49, the pain was caused by malignant disease. It was most severe during the evening and night, and was of a "burning" character, with "tearing" and "dragging" sensations during movement, and it usually prevented sleep. One evening she received 1 grain of exalgine while suffering greatly from pain; in ten minutes the pain was lessened, and she soon fell asleep, and slept well for the greater part of the night. On another occasion when the pain, however, was less severe, 1 grain again produced marked relief. In the second case, much pain and tenderness were present in a young patient, I. J., aged 19, suffering from a cicatrized ulcer and catarrh of the stomach. While the pain and tenderness were present, half a grain of exalgine on two occasions gave slight, but only brief, relief; and on other two occasions the same dose appeared to give marked relief for several hours.

To conclude this detailed statement of the observations that have been made, in a case of cancer of the mesentery, ten administrations of from 1 to 4 grains each were successful in giving partial relief from severe pain on six occasions, but entirely failed on four occasions; in a case of extensive carcinoma of the liver 2 grains did not have any effect on the pain on two occasions; in a case of large aneurysm of the descending portion of the thoracic aorta with erosion of several vertebræ, half a grain and 1 grain several times failed to give distinct relief; and in a case of lumbar abscess of

DISEASES.	Number of Observations.	Number Successful.	Number Unsuccessful or Doubtful.
Facial neuralgia..........	8	8	—
Sciatica..................	10	9	1
Herpetic neuralgia.......	10	9	1
Neuralgia of arm in hemiplegia................	11	11	—
Locomotor ataxy, 1st case,	2	2	—
" 2d case,	1	1	—
Toothache, 1st case.......	2	2	—
" 2d case.......	2	2	—
" 3d case.......	2	2	—
" 4th case......	2	—	2
Cardiac angina...........	2	2	—
Pleuritic pain, 1st case....	1	—	1
" 2d case....	4	4	—
Rheumatic synovitis......	4	4	—
Blennorrhagic rheumatism,	2	1	1
Gastric pain, cancer......	2	2	—
" catarrh and cicatrized ulcer,	4	2	2
Cancer in abdomen.......	10	6	4
Carcinoma of liver.......	2	—	2
Aneurysm of aorta.......	4	—	4
Lumbar abscess..........	3	—	3
	88	67	21

long standing, and discharging through a drainage-tube, where morphine had for several weeks been subcutaneously injected, three separate administrations of half a grain of exalgine did not affect the pain.

The observations I have briefly described were made on twenty-one patients, and in sixteen forms of disease. The majority of the patients were inmates of the hospital, and I have to thank my resident physician, Dr. Gibson, for the large amount of careful work he has done in connection with the observations. In order to place the results clearly before you, I have summarized them in the above table:

The table shows that 88 separate administrations of exalgine were made, that in 67 of them pain was relieved, and that in 21 no distinct benefit was gained. The condition of some of the patients, however, was not one in which the pain that existed was likely to be removed by any substance that did not produce general narcotism; as, for example, that of the patients represented in the three last diseases in the table. The best results, undoubtedly, were obtained in neuralgia; and if we consider separately the observations in that disease, included in the table between "Facial neuralgia" and "Cardiac angina," we shall find that in 52 administrations 48 were successful, and only 4 unsuccessful. Allowing for fallacies in estimating therapeutic effects where reliance has almost solely to be placed on the statements of patients, these results are satisfactory, and justify the hope that exalgine may take a useful and important place among the remedies by which pain is relieved. Its analgesic power is not a very powerful one, but it has the enormous advantages of being free from the disturbances and inconveniences that are associated with the action of nearly all other pain-subduing agents and from the dangers inseparable from the use of the more powerful of these agents.—*British Medical Journal.*

THE COMPLICATIONS AND SEQUELÆ OF INFLUENZA.

By William H. Draper, M.D., New York.

I shall devote the few remarks which I have to make in this discussion to a brief consideration of the complications and sequelæ of the epidemic influenza. These complications and sequelæ may be prescribed, for the most part, as exaggerated expressions, or a more or less protracted persistence of the ordinary symptoms of the disease. They are, therefore, like the symptoms, divisible into two principal varieties: First, those which are included in the sensory-motor derangements which result from the effect of the materies morbi, whatever it may be, upon the cerebro-spinal system; and, secondly, those which illustrate the manifold and severe lesions which the disease determines in the mucous membranes and parenchymatous tissues. Sometimes the disease manifests itself mainly by its cerebro-spinal symptoms, and sometimes the catarrhal lesions constitute its prominent feature; but commonly it presents a combination of more or less profound derangement of nervous functions with varied forms of catarrhal and parenchymatous affections. In many respects epidemic influenza presents striking analogies to the other infectious fevers, and notably, perhaps, as has been repeatedly observed, to epidemic cerebro-spinal meningitis. In its sudden and often violent mode of onset, in the variety and occasional intensity of its nervous symptoms, in its irregular febrile movement, in its manifold lesions and in its marked tendency to relapse, it certainly often reminds us of this form of epidemic meningitis. All the symptoms suggest irritation of the cerebro-spinal axis, more or less severe, and it seems probable that the lesions of epidemic influenza, like those of epidemic meningitis, are determined by vaso-motor derangement.

I have said that the complications of epidemic influenza are, as a rule, only exaggerated expressions of its ordinary symptoms. To the chill, headache, and more or less severe malaise, which commonly characterize the attack, there may be added delirium, and in children convulsions; cases have been reported which, in their onset, have been mistaken for meningitis. In some instances the nervous shock manifests itself by giddiness and faintness, with an abrupt and inexplicable failure of mental and muscular power which may surprise the victims on the street or at their occupations, and compel instant capitulation to this subtle and insidious disease. The mental hebitude which, in varying degrees, is a common phenomenon, may even assume the features of melancholia, and cases of suicide have been recorded in this as in previous epidemics. The muscular paresis is often so extreme as to render patients quite helpless. The sensory disturbances are at first more or less generalized in the form of cutaneous hyperæsthesia, muscular pains and soreness. Definite neuralgias in the distribution of important nerve-trunks, though occasionally observed at the outset of the disease, are, I think, more often consecutive phenomena. These neuralgias affect especially the cervico-occipital, the trigeminal, the intercostal, the lumbo-abdominal and the sciatic distributions. They often are intermittent, like the neuralgias of malarial origin, but without any regular periodicity. They are sometimes accompanied by exquisite tenderness along the course of the affected nerve, and are much aggravated by movement, two features which seem to indicate that the lesion which determines them is a perineuritis. A few cases have fallen under my notice in which the symptoms of an interstitial, and possibly even of a parenchymatous neuritis were present. In one case of this description, which occurred during convalescence from catarrhal pneumonia, the musculo-spiral and median nerves of the left arm were involved. Paralysis of the flexors and extensors of the forearm followed, with considerable atrophy. A paretic condition of the limbs, following brachial and sciatic neuralgias, without ostensible atrophy, has been a common observation. I have not seen any atrophic disturbances in the skin excepting in connection with the trigeminal neuralgias; conjunctival congestion and herpetic eruptions about the mouth have been frequently observed. As a rule, I think the neuralgias occurring as sequelæ of influenza have been confined to the distribution of single nerve-trunks, to a branch of the trigeminal, generally the supra-orbital, of the brachial or sciatic plexus, or to an intercostal nerve on one side, though I have seen a number of cases of double sciatica and one of multiple neuritis, which I believe to have been of influenzal origin.

A conspicuous feature of the nervous phenomena of influenza has been their protracted duration. This has been manifested frequently in the persistence of the neuralgias, and especially in a continuance for some weeks of muscular weakness, fatigue on slight exertion, mental depression, in a feeble and rapid pulse, and generally in a slow and halting recovery.

The complications of the catarrhal form have presented themselves most frequently in the respiratory tract. Cases of acute pharyngitis with intense congestion of the mucous membrane, extending sometimes into the Eustachian tube and causing otitis media, have not been uncommon. Laryngitis and tracheitis, accompanied by a paroxysmal, pertussis-like cough, have also been observed, complicated in such a way with the nervous symptoms of influenza as to leave no doubt of their specific origin. But the most serious and important complications of the catarrhal form of the disease have been bronchitis, broncho pneumonia, pleursy and pleuro-pneumonia. The peculiar feature of the bronchitis, in my experience, is that it has often been confined to one lung or to a portion of one lung. It has not usually been accompanied by much expectoration, but rather by feeble respiration with only occasional moist or dry râles on forced inspiration. The development of a lobular pneumonia from this condition has generally been slow, and the signs of consolidation often difficult to determine after the subjective signs have suggested its existence. A localized pleurisy is sometimes superadded to this condition.

In the cases of lobar pneumonia the onset of the disease has, I think, been as characteristic in its suddenness, and the progress of the consolidation has been as rapid, as is ordinarily observed in croupous-pneumonia. It has seemed to me that the pleuritic element in the severe cases has been unusually pronounced, the pain intense and widely distributed, and the tenderness of the costal and abdominal walls extreme. I have also noticed that even in cases of large pulmonary lesion the vital signs did not present the characteristic features which usually prevail in ordinary lobar pneumonia. The range of the temperature has not, as a rule, been so high and the pulse-respiration ratio has been more irregular. Defervescence has, in my observation, seemed to occur earlier and the resolution of the lesion to be slower. The slow resolution has been due in some cases to the pleuritic complication which, as I have before remarked, has been unusually severe.

The complicating lesions in the gastro-intestinal canal have not, in my experience, been common, but they have occurred with sufficient frequency in this and former epidemics of influenza to justify the statement that the disease may spend its force in this direction, and without the appearance of the usual pulmonary symptoms. In some instances the gastro-intestinal derangement has been so severe as to suggest the existence of typhoid fever, especially in the exceptional cases where the fever has continued for a week or longer, in connection with abdominal pain and tenderness, with gurgling in the ileo-cæcal region. In two such cases which I have seen the stools contained blood.

I have not observed any complications affecting the genito-urinary tract. Cases of cystitis and of acute uterine catarrh have been described, accompanied by the general constitutional disturbances which characterize the grip, and though one is too prone, perhaps, during the prevalence of such a disease to multiply its manifestations, it is not improbable that the morbid influence complicates, if it does not determine, a great variety of structural derangements.

Many observers in this and in former epidemics have described various forms of erythema complicating influenza. I have several times observed herpetic lesions, especially about the head and face, with œdema of the lids, associated with neuralgia, but I have probably overlooked the scarlatiniform eruption which has been reported in many cases. The occurrence of cutaneous, and even of arthritic, lesions in a disease which often exhibits such remarkable cerebral and peripheral nerve-irritation is certainly to be expected.

In conclusion, I have only to note the remarkable frequency of relapses in this disease, and also the fact, especially noted in hospital patients, that the relapse is more severe and accompanied by more serious lesions than the original attack. The tendency to relapse, while frequently the result of imprudence, has often been observed in those who have been carefully guarded against exertion or exposure.

From this brief and imperfect sketch of the complications and sequelæ of epidemic influenza it seems evident that the determining cause of the disease, whatever it may be, is one which spends its force, primarily and directly, upon the nervous system. Its most serious results have, as a rule, been observed in persons of advanced years, and in those who were enfeebled by previous disease or intemperate habits.

The relative mortality of the malady has, to be sure, not been large, but when we consider, apart from the mortality it has caused. the vast sum of human energy that it has destroyed, and the check that it has everywhere put upon the wheels of human industry, its effects have indeed been appalling.—*Medical Record.*

EDITORIAL.

THE NORTH CAROLINA MEDICAL JOURNAL.

MONTHLY JOURNAL OF MEDICINE AND SURGERY, PUBLISHED IN WILMINGTON, N. C.

THOMAS F. WOOD, M. D., Wilmington, N. C., } Editors.
GEO. GILLETT THOMAS, M. D., " }

☞ *Original communications are solicited from all parts of the country, and especially from the medical profession of* THE CAROLINAS. *Articles requiring illustrations can be promptly supplied by previous arrangement with the Editors. Any subscriber can have a specimen number sent free of cost to a friend whose attention he desires to call to the* JOURNAL, *by sending the address to this Office. Prompt remittances from subscribers are absolutely necessary to enable us to maintain our work with vigor and acceptability. All remittances must be made payable to* THOMAS F. WOOD, M.D., *P. O. Drawer* 791, *Wilmington, N. C.*

PROPOSAL TO MAKE THE BOARD OF MEDICAL EXAMINERS CONTINUOUS—WE MUST HAVE THE BEST MEN—REGISTRATION OF MEMBERS—NO MORE MEMBERS BY PROXY.

The Board of Examiners, as at present constituted, comes to an abrupt end every six years, and although this makes no interval of executive authority, it has occurred to several of the thinking members of the Society that such an organization could be made, as to secure two new members every two years. An examination of the law will show that the election of the Board of Examiners every six years is an arbitrary custom, and is not necessary by the letter of the law. It was adopted by the first Board in 1859, and has been continued ever since, working very well up to this time, but liable, through unforseen vicissitudes, to jeopardize the high standing which our Boards are striving to attain. As the continuance of the good work inaugurated depends greatly upon the transmission of the experience gained by actual service, it is obvious that the election of six new members at one time is open to the objection that they all begin their work in an entirely new field to most of them, and that it takes two or three sessions before they can get the headway. It is suggested, therefore, that in the election of the new Board that two be elected for two years, two for four years and three for six years; then by electing successors every two years we will have a Board almost continuous in purpose and experience. This is an old plan, one that has worked well in the organization of the State Board of Health and elsewhere.

The obligations which rest upon the Society in selecting only its best men, cannot be too often emphasized. We should again and again remind ourselves that, although we began as a volunteer Society, and had to work our way to our present position step by step, we are now an incorporated part of the executive machinery of the Commonwealth, determining, in reality, who are fit to serve the people in the relation of physician, and indirectly choosing the supervisors of the public health. It is an honor to the profession that we have worked so harmoniously, with such steadiness of purpose to attain these great ends, but it also brings us to the responsibility which we owe the people of the State, and this must outweigh all ambitious personal consideration. The honor of being on our Board of Examiners is the highest distinction that can be bestowed upon any one of us, and we ought next May, as we have done heretofore, so manage that the office shall be worthily bestowed.

The registration of members should be insisted on by the Secretary. Our Society is so large now that there is no other way to get at the personnel of the meeting, to enable the President to properly constitute the necessary committees, and for other obvious reasons.

The Society very wisely decided not to further carry out the experiment of allowing persons to join by proxy. The meaning of our assembling together is work and mutual improvement. We desire also to point out that it is the custom of the Society not to elect absent members to positions of honor, and it is but reasonable that those who make the sacrifice of time and money for the good of the Society should, all things being eqal, be recipients of honors. It is a hardship sometimes, especially in the case of one who may have been a regular attendant year by year, but on the year of the election for members of the Boards should not be able to attend, and still have eminent qualifications for a position.

THE "FAT TAKES" OF ITINERANT OCULISTS.

We received a communication a few days ago which we would have been pleased to publish. It was on the subject of the itinerant spectacles dealers who have been visiting our State, making two notable stays at Wilmington and Tarborough, carrying off as much cash as a first class circus and leaving behind them a record of the most heartless extortion and malpractice. The communication in question set forth specially the malpractice of a certain dealer—of course pretending to be a learned foreigner, skilled in all the details of grinding glasses and an expert ophthalmologist—but it would have been such a good advertisement for him, we advised the writer to withhold it for the present.

We desire to say, though, from what we know and what we have gathered from veracious physicians of the frauds of these itinerants, that an effort ought to be made to see if our medical law cannot be applied to them as well as to all other pretenders who extort money from the unsuspecting people.

The law is evaded by these itinerants in this way: Not having a license to practice medicine, they announce that they make no charge for examination, thereby escaping the clause of the law covering the point, but it is very certain they make up the price of examination in their charges for glasses. One case will illustrate: A poor colored woman consulted the writer about her eyes, saying that her glasses were "drawing her eyes," explaining at the same time that she had purchased them—common steel-bow spectacles—at $2.00 from a travelling dealer. An examination of the eyes showed that the woman had cataract, visible upon a very slight inspection, and that the whole transaction was fraudulent.

Not only are the dealings of these so-called opticians in many cases fraudulent and extortionate, but it is working great injustice to the qualified ophthalmologists who practice in our midst. The dodge of making the patient pay for the examination in the price of his glasses is an evasion of the law, and until we can get such amendments as will cover these wrongs, this malpractice ought to be made known to the public. No pretense of fine pebbles and superior crystal lenses can justify the charge of four dollars for ordinary steel spectacles. Doubtless these men show an amount of expertness in adapting glasses, pleasing many of their customers so well that the unusual price is not a consideration, but it has fallen to the lot of many poor people to find out, when the "Professor" was gone, that their spectacles were no aid to vision at all.

LESSONS IN URINALYSIS AT THE OXFORD MEETING, MAY 27.

Dr. J. W. Long, of Randleman, will give some lessons in urinary chemistry during the session of the medical Society at Oxford on the 27th–30th May, in his own room at the hotel. He will take pleasure in seeing as many as many as desire to refresh themselves or learn the newer processes in analysis.

We desire to append the request that if any physician who intends to be present can bring a specimen of urine from a typhoid patient between the 4th and 14th day of the fever, it will be greatly appreciated, as Ehrlich's test will be demonstrated and discussed.

RARE MEDICAL BOOKS is the subject of some remarks by Dr. Billings in "The Johns Hopkins Hospital Bulletin," very interesting to students of bibliography and lovers of books. The curious thing is that some of the rarest of these books are those of American origin.

REVIEWS AND BOOK NOTICES.

History and Pathology of Vaccination. Vol. I. A Critical Inquiry.

History and Pathologx of Vaccination. Selected Essays. Vol. II. (Concluded.)

The author's account of various "lymphs" that have been cultivated from that of Thiele in 1839 to that of Voigt clearly shows that the inoculation experiments on animals has been everywhere dominated by the earliest dogma of the English vaccinators, that the organism of the cow was the great laboratory in which variolous virus was transmitted into harmless and benignant vaccine, and the analysis made by the author gives the fairest statement of the whole story of failures explained away, theorized out of existence, or stretched to suit the dogma. There is but little doubt that variolous matter inserted into the cow's udder always remained variolous matter, and while it sometimes assumed a mild form when, as rarely happened, it was successfully inoculated into the cow, it differed but little in this respect from variolous virus cultivated from man to man by the old inoculators, and if the truth was known, the reputed vaccinfer was as purely a source of small-pox effluvia as the singular cases which were inoculated by the modified small-pox virus known to Dimsdale and perhaps to Jenner himself. It is very significant that Voigt, of Hamburg (whose paper we published in the North Carolina Medical Journal), discovered "the true variolous character of the variola-vaccine lymph, and the tendency, in less early removes, to produce small pox," which "is probably the reason why he has abandoned its use, in favor, as I am informed by M. Layet, of the ordinary spontaneous cow-pox lymph from the vaccination station at Rotterdam." Vol. I, p. 304.

We think he has made a true estimate of the inoculations made by Ceely, Badcock, Voigt, and others, and he points out with much fearlessness the fact that even the illustrations which have been given as the natural appearance of the natural cow-pox, and the transmutations of variolous virus appearing upon the udder and teats of cattle, by English writers, differs from the illustrations made by Hering and the German authors. After all, though, the most incredible thing about these lymphs is that successes should follow the experiments of a very few, and that a very large number of trials made by competent men who followed minutely all the directions given by these successful persons utterly failed. Especially was this noticeable in the Confederate States, where the production of vaccine was a matter of life and death, and where it was entrusted to men who had had large experience.

Future students will thank the author for bringing together such important pamphlets as those of Loy and Sacco, those of Ceely, with the *fac simile* colored illustrations, and the still rarer accounts of the outbreaks of horse-pox at Toulouse and Algeria, with the illustrations of disease by M. Peuch.

It will not serve any good purpose to pursue further the theories which the author has drawn from the rich material he has generously brought together further than to say that his conclusions as to the failure of the Jennerian method of vaccination in the suppression of small-pox are not based upon his own material facts, and the assertion that "ere long a system of compulsory notification and isolation will replace vaccination" is as fanciful a statement as ever emanated from Anti-Vaccination Society of his own native land. True, Jenner's application of cow-pox was empirical and founded upon tradition; true, in accepting it false theories grew up around it, but with all this the practical men who had the management of small-pox epidemics succeeded with the application of this bit of empiricism in staying the dread scourge. It would be very unfortunate to substitute Professor Crookshank's theoretical deductions and reëstablish inoculation and isolation after all we know about inoculation.

We commend these great volumes to the thinkers in our profession. They are going to stimulate renewed study of the pathology of vaccine diseases, and if we must prejudge the case, we are going to see a vast amount of mischief set on foot by his suggestions. Ardent are the virus hunters these days, and from Pasteur to his imitators in Brazil and Spain, and wherever a "laboratory" can be endowed we will have such a flood of "lymphs" and "viruses" and "vaccines" that the pedigree of a genuine cow-pox will puzzle the best vaccinists of both continents. Perhaps a sober second thought will drive the would-be discoverers to study the facts in the case, if they do let them go to Professor Crookshank's reprints of the older vaccinists, but beware of some of his radical conclusions.

A MANUAL OF THE ORGANIC MATERIA MEDICA. Being a Guide to the Materia Medica of the Vegetable and Animal Kingdoms for the Use of Students, Druggists, Pharmacists and Physicians. By John M. Maisch, Ph.M., Phar.D. Fourth Edition. Philadelphia: Lea Brothers & Co.

As the several editions have reached us we have always spoken highly of this book, as it struck us as being well adapted to the students of medicine who in these days have no practical teaching in pharmacognosy, and who cannot, in justice to their chosen profession, get along creditably without as much as this volume gives them.

The present edition is marked by the list of drugs arranged according to origin, following the *Genera Plantarum* of Bentham and Hooker. Faithful revision is noted everywhere, although not many new drugs have been added since the last edition.

The text and wood-cuts are so beautiful in their typography it is a pleasure to run through the pages, even for a cursory glance.

MEDICAL STATISTICS OF LIFE INSURANCE.

Through the courtesy of the Washington Life Insurance Company we have received a copy of a very handsomely printed volume giving the record of actuarial and medical statistics of the Company for the twenty-six years of its existence. There has been a great lack of just such evidence as is here contained, in this country, from the companies that have in their possession records of selected lives, and the analyses here given are of such a character as to hold out the hope that other companies, having far older records and more numerous policies, will emulate the example of the Washington Life.

It is of the medical statistics we desire to write. First, as to nativity of the insured and causes of death. Nativity exercises but little influence in determining the cause of death. The duration of policies between native and foreign born being three-quarters of a year. Of the foreign born natives of Ireland have the best record, and the natives of Canada the worst. The high average of the native born is maintained throughout the various causes of death, with the exception of zymotic diseases, pneumonia and diseases of the kidneys, in which classes the percentage is somewhat below the average for all nationalities. The greatest difference in duration of insurance between the native and foreign born is found in classes of cancer, apoplexy and suicides, the difference in favor of the native born being 3.18 years, 2.82 years and 2.70 years in the three classes respectively.

The next head is of peculiar interest, viz: *The Residence at Death*, indicating the effect of locality on cause of death.

New England gives the highest mortality from cancer, apoplexy, diseases of the heart and diseases of the kidneys, and a very low mortality from zymotic diseases, diseases of the liver, and accidents, and, strange to say, that mortality from consumption is below the average of the total number.

The Southern States gives the lowest mortality from typhoid fever, which is in strong contrast with deaths from other zymotic diseases. We are not given the items as to the particular diseases thus included, but the two items of typhoid fever, added to other zymotic diseases, gives more than twice the mortality of any other section named.

Consumption finds its lowest mortality in the State of New York, while the Southern States, contrary to expectation, come in third in order of mortality, being somewhat greater than in Illinois, Ohio and Indiana.

In the South there is a very large percentage of diseases of the liver, and a very small one of diseases of the kidney.

In tabulating the duration of insurance before death, the short term of the Southern policy-holder is remarkable as to all the diseases enumerated, being very striking in mortality from apoplexy, in which the average length of insurance was only 5.40 years.

The expectation of life, ranked according to percentage attained by occupation, shows that merchants stand at the head of the list, and physicians third, while clergymen are fifth on the list, and clerks the very lowest. In the latter occupation it is explained that deaths from consumption are great, being as much as one-third of the whole class.

The mortality from consumption, the great scourge of the human race, is a study of much interest, and we transcribe some facts deduced from the tables. A consumptive patient appearing in the family record is of less significance than when it occurs in the personal history of the individual.

Two or more deaths by consumption among the brothers and sisters appear to exert much less influence than the death of one parent. In one group in which there was a hereditary taint in parents 37.98 died of consumption, but where there was acquired tendency combined with hereditary taint the percentage was 59.09.

BACTERIAL POISONING BY WHISKEY AND QUININE USED FOR MEDICINE.—H. P. Campbell, Ph.G. in the *American Journal of Pharmacy*, March, 1890, gives what will be to most readers a remarkable demonstration of the dangers of bacterial poisoning from what was considered not only a harmless mixture of quinine and whiskey, but rather considered an antiseptic mixture. A patient had a mixture of quinine and whiskey put up, but was put aside for a month before using. When it was taken it produced marked symptoms of poisoning by an irritant which led to a suspicion that the apothecary had dispensed a poisonous drug. The examination made by Mr. Campbell showed that quinine and whiskey were present. The slimy sediment he found, which did not dissolve on shaking, he examined under the microscope, and he found it to consist almost entirely of micro-organisms, with a few particles of woody matter which had served as nuclei for the formation of the many colonies. He estimated that a tablespoonful dose would contain about 2,500,000 of these micro-organisms.

DEATHS FROM ETHER—now that this agent is becoming the popular anæsthetic in New York and other sec ions—are becoming about as numerous, apparently, as deaths from chloroform, used as the surgical anæsthetic. Another death from ether is reported to have occurred in Bellevue Hospital, New York last November. No criticism is passed upon the manner of administration by the doctor. But it turns out at the autopsy that the patient—a painter, 28 years of age—would have died anyway, even if chloroform had been used, from fatty degeneration of the heart—so says Dr. Gerster. But in Atlanta, Ga., during the latter part of January, another death resulted in the practice of Dr. Westmoreland, from ether, used as the anæsthetic—and no one doubts Dr. Westmoreland's ability.—*Virginia Medical Monthly.*

THE SUPREME COURT OF THE UNITED STATES HAS DECIDED THAT ANY STATE HAS THE RIGHT TO REGULATE THE PRACTISE OF MEDICINE WITHIN ITS BORDERS.

At the request of a subscriber we have reproduced enough of the case of Dent *vs.* State of West Virginia, to show our readers how at every point our own licensing law is sustained :

Dent *vs.* West Virginia.

"The statute of West Virginia which requires every practitioner of medicine in the State to obtain a certificate from the State Board of Health that he is a graduate of a reputable medical college in the school of medicine to which he belongs; or that he has practised medicine in the State continuously for ten years prior to March 8, 1881; or that he has been found, upon examination, to be qualified to practise medicine in all its departments, and which subjects a person practising without such certificate to prosecution and punishment for a misdemeanor, does not, when enforced against a person who had been a practising physician in the State for a period of five years before 1881, without a diploma of a reputable medical college in the school of medicine to which he belonged, deprive him of his estate or interest in the profession without the process of law.

"The State, in the exercise of its power to provide for the general welfare of its people, may exact from parties before they can practice medicine a degree of skill and learning in that profession upon which the community employing their services may confidently rely; and, to ascertain whether they have such qualifications, require them to obtain a certificate from a Board or other authority competent to judge in that respect. If the qualifications required are appropriate to the profession, and attainable by reasonable study or application, their validity is not subject to objection because of their stringency or difficulty."

DISCUSSION.

* * * * * * * *

"The power of the State to provide for the general welfare of its people authorizes it to prescribe all such regulations as in its judgment will secure, or tend to secure, them against the consequences of ignorance and incapacity as well as of deception and fraud. As one means to this end it has been the practice in different States, trom time immemorial, to exact in many pursuits a certain degree of skill and learning upon which the community may confidently rely, their possession being generally ascertained upon an examination of parties by competent persons, or inferred from a certificate to them in the form of a diploma or license from an institution established for instruction on the subjects, scientific and otherwise, with which such pursuits have to deal. The nature and extent of the qualifications required must depend primarily upon the judgment of the State as to their necessity. If they are appropriate to the calling or profession, and attainable by reasonable study or application, no objection to their validity can be raised because of their stringency or difficulty. It is only when they have no relation to such calling or profession, or are unattainable by such reasonable study and application that they can operate to deprive one of his right to pursue a lawful vocation."

"Few professions require more careful preparation by one who seeks to enter it than that of medicine. It has to deal with all the subtle and mysterious influences upon which health and life depend, and requires not only a knowledge of the properties of vegetable and mineral substances, but of the human body in all its complicated parts, and their relation to each other, as well as their influence upon the mind. The physician must be able to detect readily the presence of disease, and prescribe appropriate remedies for its removal. Every one may have occasion to consult him, but comparatively few can judge of the qualifications of learning and skill which he possesses. Reliance must be placed upon the assurance given by his license, issued by an authority competent to judge in that respect, that he possesses the requisite qualifications. Due consideration, therefore, for the protection of society may well induce the State to exclude from practise those who have not such a license, or who are found, upon examination, not to be duly qualified. The same reasons which control in imposing conditions, upon compliance with which the physician is allowed to practise in the first instance, may call for further conditions, as new modes of treating disease are discovered or a more thorough acquaintance is obtrined of the remedial properties of vegetable and mineral substances, or a more accurate knowledge is acquired of the human system and of the agencies by which it is affected. It would not be deemed a matter for serious discussion that a knowledge of the new acquisitions of the profession from time to time advances in its attainment of the relief of the sick and suffering, should be required for continuance in its practice, but for the earnestness which the plaintiff in error insists that, by being compelled to obtain the certificate required, and prevented from continuing in practice without it, he is deprived of his right and estate in his profession without due process of law. We perceive nothing in the statute which indicates an intention of the Legislature to deprive one of any of his rights. No one has a right to practice medicine without having the necessary qualifications of learning and skill; and the statute only requires that whosoever assumes, by offering to the community his services as a physician, that he possesses such learning and skill, shall present evidence of it by a certificate or license from a body designated by the State as a competent judge of his qualifications."

* * * * * * * *

"There is nothing of an arbitrary character in the provisions of the statute in question; it applies to all physicians, except those who may be called for a special purpose from another State; it imposes no conditions which cannot be readily met; and it is made enforceable in the mode usual in kindred matters, that is, by regular proceedings adapted to the case. It authorizes an examination of the applicant by the Board of Health as to his qualifications when he has no evidence of them in the diploma of a reputable medical college in the school of medicine to which he belongs, or has not practised in the State a designated period before March, 1881. If, in the proceedings under the statute, there should be any unfair or unjust action on the part of the Board in refusing him a certificate, we doubt not that a remedy would be found in the courts of the State. But no such imputation can be made, for the plaintiff in error did not submit himself to the examination of the Board after it had decided that the diploma he presented was insufficient."

Judgment of the lower court was affirmed, thereby substantiating the soundness of the West Virginia law in regulating the practice of medicine.

REPORT OF THE EASTERN ASYLUM FOR THE INSANE.

We have received the Superintendent's Report of the Eastern Asylum for the Insane; for 1889, through the courtesy of Dr. J. F. Miller, and note that he is a diligent, painstaking, economical officer, alive to the necessities of the humble insane intrusted to his care. We quote a striking paragraph from the report, which we think demands careful consideration. Just now we have no comments to make, but append an editorial from the *Statesville Landmark*, all of which we submit to Superintendent Miller and our readers :

ANOTHER SUGGESTION, VIZ: THAT A PARTY ARRAIGNED FOR MURDER WHO PLEADS INSANITY SHOULD BE COMMITTED TO THE INSANE ASYLUM UNTIL DETERMINED.

"It is becoming a popular dodge with many bad men to plead insanity when arraigned for murder. The disagreement of opinion among medical men as to the mental status of such accused is often the cause of much confusion in the minds of judge and jury as well as of the public, and tends to bring expert testimony into disrepute. To such a degree is this the case that before some courts so-called medical testimony is held in great contempt.

"The opinion of intelligent physicians is sought and respected concerning the various ills to which "flesh is heir," and the question naturally arises, Why is their opinion so little respected in a question like the one under consideration? I answer, because physicians who are summoned to testify in such cases, as a rule, do not have at the time, nor have they had, sufficient time nor opportunities for observation, in order to express a reliable opinion in a question of such great importance as that which involves the life or death of a fellow-man. Any man of average intellect who is accused of murder can feign insanity with sufficient success to cloud the mind of expert witnesses and jury as to his mental status. Again, there is a form of insanity which manifests itself at long intervals and sometimes only on certain questions. Without the opportunity of frequent intercourse and prolonged observation of such cases, the insanity of such an one would not be suspected.

"In view of these facts I am fully persuaded that where a party is arraigned for murder, and the plea of insanity is made in extenuation of the crime, *and where there is any doubt as to his mental condition*, legal proceedings should be arrested, and such party should be committed to an insane asylum for observation. If such an one be insane, the asylum is the proper place for him. If he be feigning insanity, in my humble judgment, in an insane asylum is the proper place to detect his dissimulation. It may be contended by some that such a party, knowing that he is committed for observation, would continue to affect insanity and his condition still remain in doubt. There are cases on record where sharp fellows have succeeded so well that superintendent and assistant physicians for months have been in doubt as to their true mental condition, but sooner or later the ears of the ass will appear above the skin of the lion, and there will be no doubt as to what manner of creature he is."

DR. MILLER'S REPORT—THE CRIMINAL AND PROFESSED CRIMINAL INSANE.

Dr. Miller's report for 1889, on the condition of the Eastern North Carolina Insane Asylum for the colored race, at Goldsboro, is interesting as showing what industry and attention to business will do. From being a very dilapidated and very poor institution, the Eastern Asylum is now on a good basis and compares very favorably with institutions of like character the world over. The doctor is to be congratulated upon his success, and we are sure the coming year will add to it.

In concluding his report, Dr. Miller makes two suggestions which are of general interest:

First, that the counties shall provide brick buildings, heated by furnace, and safe from fire, for their harmless and incurable insane now unable to be accommodated in the asylums. It is the general opinion of all who have given this matter careful study that the insane should be cared for in State asylums, but if the State does not make provision the doctor's suggestion is much better than that they should be kept in the jails, poor houses and log pens.

Second, that, pending decision by the courts, a person under indictment for a criminal offence, for whom a plea of insanity is entered, the court being in doubt, the prisoner shall be committed to an insane asylum for observation.

This is a most dangerous suggestion for these institutions already taxed to their utmost to accommodate those needing such care and protection, who are innocent of any crime. The correct principle on which asylums should be operated is that they are hospitals for the care and treatment of sick persons, and they need tenderer care than those sick in body. Every effort should be to rid the asylum of as many as possible of the elements which go to make a prison; this would be impossible were there a class who had to be cared for as prisoners.

Already in the asylums the class which is most a burden is that which embraces the undoubtedly insane who have committed crimes. Add to these a class about whom there is a question as to their insanity, and the burden would be grievous indeed.

Beside this, there will be under such a law those who are really feigning. We have no right to throw into the society of innocent sick people designing criminals, no matter how short their stay will be; and this class would play havoc in a well-ordered institution.

The asylum physician who is conscientiously working for the good of his patients is unfit for the detective duty that such a law would impose on him, nor has the time to leave his work and dance attendance at the courts for an indefinite period. Any intelligent physician, with good opportunity for observation, ought to be able to tell when a person is feigning insanity in a jail as well as out of one.

Let us suggest a plan: that is, that the State provide for its criminal insane at the State Penitentiary, and so forever rid the asylums of this burdensome class. Then there would be less feigning and less need for expert testimony.—*Statesville Landmark.*

* * *

ACETANILID MORE SOLUBLE IN PRESENCE OF ANTIPYRINE.—A. Zimmermann calls attention to the increased solubility of acetanilid in water when antipyrine is present, 1 fluid ounce dissolving 16 grains of the acetanilid by addition of 80 grains of antipyrine.—*Pharmaceutical Record.*

ANTIPYRINE and morphine are said to allay pain, when used conjointly, much better than ether alone.—*Prag. Rdsch.*

[Also true as to acetanilid.—EDS.]

CORRESPONDENCE.

THE BOARD OF MEDICAL EXAMINERS—ITS WORK—ITS PROSPECTS—THE NECESSITY FOR CONTINUING SOME OF THE OLD BOARD ON THE NEW BOARD TO BE ELECTED.

Messrs. Editors North Carolina Journal:

It seems to me impossible for one to overestimate the importance of having our State Board of Medical Examiners composed of the very best possible material to be found within our ranks. Especially is this so during the crisis through which medical legislation is now passing in our State.

After much careful thought and unremitting labor on the part of the Medical Society, as a whole, and particularly of certain of its individual members, whose indefatigable zeal for the welfare of the profession has placed us all under obligations to them, we have a law on our statute books which speaks in no uncertain tones a warning to irregulars and quacks; a law which we are not afraid to test before our highest tribunal of justice; a law which is the cynosure of our brethren in distant States, and which entitles us justly to rank as the banner State on medical legislation throughout the land. But whether or not we shall remain entitled to the laurels which we have won and continue in the front ranks in this particular, and whether our laws shall continue to be administered with that justice and impartiality which alone can and will keep the *vox populi* on our side, rests largely, nay, almost solely, with the incoming Board of Examiners to be elected in Oxford.

For six years the present Board have performed the onerous duties of their office with almost universal satisfaction. True, as human beings they may not be incapable of error, but that there are such men watching and vigilantly guarding the threshold of the profession, sifting as wheat all that seek admission to its privileges, should be a matter of congratulation to every honorable and conscientious physician in the State, and certainly so to a long-suffering and much-imposed-on public.

For such gentlemen as these, who are "true and tried," who have thus far so honorably discharged the trust imposed upon them by their fellows and the State, and who have by six years of experience—and very ripe experience at that—learned many things about conducting medical examinations which can only be learned by new men through a similar experience—I say for such men to go out of office all at the same time might prove a calamity to us of no small moment. Now I do not for an instant believe that there are not as good fish in the sea as ever came out of it; I do not believe our present Board are men of superior professional attainments to many who have never received any Society honors; nor do I believe that the maintenance of our medical laws depend upon any seven men in the Medical Society; but it does seem to me that for many reasons, so patent as not to deserve mention, it would be best for two or three members of the present Board to be elected by the Society to serve on the new Board for at least one year. I would suggest that one or two of the oldest members be dropped each year and new ones elected to succeed them. A plan something like this would obviate the confusion which would of necessity follow, should the new Board be composed solely of inexperienced men. It may be objected that this would be an unnecessary innovation and that the old plan has worked very well. I admit that there has been but little trouble hitherto as a result of changing suddenly the whole complexion and policy of the examining boards; but it is only since the present Board has been in office that a medical license amounted to much in law, and that the examinations have been much more than a form. If this should be considered an innovation it is certainly one born of conservatism and conceived by one who has had the opportunity of examining pretty closely into the methods observed by our present Board in conducting examinations. Indeed, it was while in the examining room at Elizabeth City that I was struck with the utter impossibility of any new set of men taking up the work where it would be left off by the present Board, and continuing it as fairly and as satisfactorily to all parties as they have done.

It may be stated that there is no law fixing the term of office of the Board so that there can be no constitutional objection to the plan proposed. I may also say that I have mentioned the matter to several representative physicians from various portions of the State, and they all think well of it. The suggestion is merely thrown out now so that deliberate action may be taken when the proper time arrives. Yours, very respectfully, H.

ADDITIONAL NOTES ON NITRATE OF POTASH IN INTERMITTENT FEVER.

Messrs. Editors North Carolina Journal:

Dear Sirs :—Since I placed in your hands for publication my brief paper on *Potassii Nitras* I have concluded to add my experience in its use for the past few days, which will be suggestive as to the manner of employing the salt.

I was called on February 4th to see a lady from the country, who for several months suffered from chill and fever; chill occurred on alternate days. Condition intensely jaundiced, considerably emaciated, entire loss of appetite, exhausted by the least exertion. Ordered 30-grain doses of *potassii nitras* to be given two hours before the time of chill and another similar dose when symptoms of chill occurred. No chill took place. The same doses ordered on the next alternate day; no recurrence of chill and no further medication employed. Jaundice cleared up completely, appetite restored, convalescence established. Patient discharged February 12th.

Was called on Wednesday to see a young lady of the city who was seized with chill and fever the preceding Sunday. Chill occurred at 6 o'clock every evening. Gave *quiniæ sulphas* for two days without beneficial result. Ordered 30-grain doses of *potassii nitras* to be given as in the case above detailed. No chill took place on the first day; on the second day, at the hour of six, the usual symptoms of chill were felt. A 30-grain dose of the salt was at once given with the effect of immediate abortion. No further medication. Patient is now attending to her usual household duties.

To-day a young man called at my office suffering from a small gluteal abscess and a fissure of the anus. Upon opening the abscess and cauterizing the fissure he was seized with a violent chill. Administered spirits of ammonia and brandy. Condition unchanged after a lapse of fifteen minutes; temperature 96° S. L., surface cold and clammy, teeth chattering, face blue and pinched. I thought of *potassii nitras*, and concluded to hazard a dose; gave 30 grains. Within seven minutes chill ceased, temperature normal, circulation reëstablished. Within ten minutes from the time of administering the salt the patient was on the street walking home. This is to me a new experience; heretofore I employed the salt only in chills presumably malarial.

To abort a malarial chill has heretofore been difficult, nay, I may say impossible of accomplishment. To abort, and at the same time to effect a radical cure, with an approximation towards uniformity, with a few grains of simple salt, has never before been accomplished, and is without precedent in medical experience.

Very respectfully yours,

J. D. Hunter, M.D.

352 Tulane Avenue, New Orleans, La.

NC Med J (O.S.) 25: 233, #4, April 1890

The Monument to Dr. J. Marion Sims.—It will please the many subscribers to the J. Marion Sims Fund to learn that the Committee having the subject of a suitable monument in charge have given unceasing attention to the subject ever since the money to be appropriated in this way was so promptly and cheerfully contributed by the many friends and admirers of the late Dr. Sims. Endeavors were made to place the execution of the work in this country, and to this end a considerable number of models were submitted to the Committee for approval by the profession, and were exhibited in the parlor of the Academy of Medicine in this city. None of them, however, gave sufficient satisfaction to warrant the Committee in an acceptance, and they were again obliged to seek for further propositions from sculptors, and this time they invited proposals from abroad. The design for a full-length figure, to be cast in bronze, nine feet in height, submitted by the Koniglischer Ergiesserei, of Munich, Bavaria (the most celebrated bronze foundry in the world), has given general satisfaction to the Committee and to the members of the family of the late Dr. Sims who have seen it. The contract for its execution has therefore been awarded to Mr. Von Miller, the proprietor of the foundry. A recent letter from him states that they are proceeding with its execution. It is expected that it will arrive in America some time next year, accompanied by the design and working-plans for a granite pedestal of about eight feet in height. The question of its site in the Central Park of this city, as first proposed, will, therefore, soon arise for consideration. It is proper for us to state further that the money contributed for this purpose has been, since its collection, deposited and still remains at interest with the United States Trust Company of this city.—*Editorial in Medical Record.*

CURRENT LITERATURE.

NOTE ON THE USE OF TURPENTINE IN TYPHOID FEVER.

By H. C. Wood, MD., LL.D., Professor of Therapeutics in the University of Pennsylvania.

The most useful articles in a medical journal are not those which are the most original, and certainly if lack of originality be a spice of value, the present note in regard to the oil of turpentine in typhoid fever will bewell flavored. The employment of the remedy I believe originated with Dr. George B. Wood, and was certainly very strongly inculcated by him, so that it has been amusing and instructive when from time to time, especially in some of the English journals, it has been brought forward as a new discovery by medical writers. Dr. George B. Wood taught that the oil of turpentine acts as a local remedy in typhoid fever, and that there are two stages of the disease in which it is especially useful. The first is at the end of the second week, when the tongue becomes especially dry and glazed, and the abdomen very distinctly tympanitic, with or without the coexistence of diarrhœa. The second period in which the remedy was especially used by the former Professor of Therapeutics in the University was during convalescence, when the perpetually recurring diarrhœa, with lack of digestive power, indicated failure of some of the intestinal ulcers to heal. For nearly twenty five years I have been following the practice of my predecessor, and I am very thoroughly convinced by experience in hospital and in private practice that many lives would be saved if the oil of turpentine was more freely used in this disease. I do not believe that it is possible to reach the ulcerations in the small intestine with nitrate of silver, or other similar readily decomposable or readily absorbable remedy. The volatile oils are absorbed slowly, and are rapidly vaporized at the temperature of the human abdomen, so that there can be no reasonable doubt that, either in the form of liquid, or more probably in the form of vapor, when given freely by the mouth, that they get into contact with the mucous membrane of the upper intestine. It has become my routine habit to give the turpentine in every case of typhoid fever, beginning about the twelfth or fifteenth day, and I believe if its use were habitual in the profession there would be much fewer cases of intestinal hæmorrhage or other severe symptoms due to a local lesion.

In my own case convalescence from typhoid fever was exceedingly slow on account of the perpetually recurring diarrhœa, and when, at the instance of Dr. George B. Wood himself, then an old man nearly 80 years of age, the turpentine was exhibited, the local symptoms had returned, on giving the turpentine again, would see them abate within twenty-four hours. The effect of the drug was scarcely mistakable. The turpentine may be disguised by means of glycerin and a volatile oil made into an emulsion, which is rarely objected to by patients. Ten or fifteen drops should be given every two or three hours during the day, the patient being allowed to rest at night. The following formula will be found satisfactory:

℞.—Ol. caryophylla	gtt. vj.
Ol. terebinth	f ʒ jss.
Glycerin Mucil. acaciæ,	aa f ℥ ss.
Syrup, Aquæ,	aa q. s. ad. f ℥ iij.

M. Sig.—Dessertspoonful as directed.—*Medical News.*

PULMONARY AUSCULTATION DONT'S.

Don't auscultate in a cold room.

Don't auscultate over the clothing.

Don't auscultate a chest before percussing it.

Don't practice immediate auscultation, but select a good stethoscope and familiarize yourself with its peculiarities.

Don't forget that the hair on the chest may give rise to crackling sounds under the stethoscope.

Don't forget that your own beard or hair may do the same in any mode of auscultation.

Don't suppose that a double stethoscope is better than a single one because it enables you to listen with both ears.

Don't forget that you can hear best with a double stethoscope when it is held in a straight line.

Don't fail to take into account that a metallic stethoscope imparts a metallic tone to all chest sounds.

Don't buy a stethoscope in which the stem does not go through the ear-piece entirely; for the stem is the principal conductor of sound, and thus insures complete continuity of material from the chest walls to the ear.

Don't lean hard on the stethoscope.

Don't allow clothing or your fingers to rub on the stethoscope while you listen.

Don't auscultate with any silk material between the patient's skin and your ear.

Don't ever omit to auscultate the apices and bases thoroughly.

Don't neglect asking your patient to cough when you are in doubt as to whether a râle is located in the alveoli or bronchi; if in the latter it will be dislodged.

Don't fail to realize that râles in one interscapular region are sometimes reflected in the opposite healthy lung through the medium of the large bronchial tubes; and that a large râle or ronchus in one of the main bronchial tubes may be transmitted over the whole or a greater part of the chest.

Don't set too high a value on a single physical sign; always endeavor to find corroborative ones.

Don't fall into the common error of believing that the crepitant râle never disappears under examination. This takes place when freshly developed crepitation is not too profuse and is subjected to repeated forced inspirations.

Don't regard a slight click at the end of inspiration, or at the beginning of expiration in an apex, as a trivial sign.

Don't forget that, as a rule, the crepitant râles at the base are more moist and crackling than at the apex, and that the latter are more resistant to treatment than the former.

Don't think, if you find a wavy or jerking respiration, that it is always a danger signal.

Don't place too much reliance on vocal resonance or bronchophony.

Don't fail, in listening for prolonged expiration, to ask your patient to breathe through his mouth. This will prevent those sounds which are produced in the nares from being transmitted into the lungs.

Don't say blowing expiration for prolonged expiration. In auscultation parlance, blowing applies to inspiration.

Don't overlook the fact that creaking and crumpling râles in an apex may indicate an old dry cavity.

Don't accept the common teaching of some text-books that the pitch of expiration in a cavity is always lower than that of inspiration.

Don't omit to remember that, in a good-sized cavity in the left lung, the heart sounds occasionally produce a metallic reverberation.

Don't conclude that, owing to the absence of well-recognized signs of disease in the chest, there is no phthisis, when wasting, cough and fever persist.

Don't fail to record the physical signs and symptoms of every case you examine.—THOMAS J. MAYS, M.D., *Medical and Surgical Reporter.*

THE OLD AND NEW PHRENOLOGIES.

Phrenology is a better word than psychology; only it cannot be sent into current English till the old phrenology of Gall and Spurzheim is certified to be dead. This is admitted by everyone save Mr. Bernard Hollander, who, in a paper read before the Anthropological Institute, has recently tried to show that the views of Gall have been unjustly set aside. What is even more remarkable, Mr. Hollander finds confirmation of the old phrenology in the discoveries of Ferrier, Hitzig, Exner and others. We are not inclined to subscribe anything to the credit of Gall and Spurzheim. They kept up a noisy and futile controversy for half a century, and caused a great deal of mind force to be wasted in wrong directions. The only lesson worth speaking of which the phrenologists left behind is a telling illustration of the enormous misleading force of mental predisposition. In fact, the rise and diffusion of phrenology form a very curious and instructive chapter in the history of human error. At one time phrenology counted as its supporters a number of men eminent in science and literature. Amongst these may be mentioned Broussais, Bouillaud, Jules Cloquet, August Comte, Ferrus, Vimont, and Voisin in France; and in Britain, Dr. Elliotson, Dr. Macnish, Sir William Ellis (the physician of Hanwell), Dr. Evanson, and Dr. William Gregory. The phrenologists held that the different mental faculties were localized on the surface of the brain, and next on the convex of the cranium. They did not assign any function to the convolutions reposing on the base of the skull, nor to those opposed to one another in the middle line, like the *gyrus fornicatus.* Indeed, it seemed as if there were no functions left for these extensive areas of the brain; for the phrenologists included in their thirty-three organs a pretty exhaustive list of all the mental faculties. Nothing looked easier; you did not require even to have seen a brain; you had just to learn the situation of the organs on the prenological bust, and then you could make out the character of any person by measuring and feeling his head. The phrenologists gave out with much solemnity that in this way they derived important aid in treating prisoners, lunatics, pupils, and, indeed, all classes of men.

It is to be noticed that phrenologists paid great attention to the different temperaments, and their noteworthy observations upon these conditions no doubt helped them in making successful guesses as to character. By the year 1850 almost all scientific men had turned their backs upon phrenology. In 1875 a book, entitled *The Skull and Brain, and their Indications of Character,* by Nicholas Morgan, was published, by the help of a bequest, for the propagation of phrenology. In this apology an attempt was made to throw discredit upon Ferrier's observations as hostile to the views of Gall and Spurzheim. In fact, the two phrenologies are incompatible. Mark out a chart with the new brain localizations, and compare it with one of the old phrenological busts, and it is at once apparent that they assign different functions to the same areas. Ferrier's motor spheres are occupied by such faculties as secretiveness and acquisitiveness, and the visual sphere of Munk covers the adhesiveness and philoprogenitiveness of Gall. Nevertheless, Mr. Hollander thinks he can show areas on the brain in which the old discoveries are confirmed by the new ones.

This is the way he goes to work: The organ of veneration was placed by Gall at the top of the head, near the new motor centre for raising the shoulders and moving the arms. In prayer the hands are brought together in obedience to an inborn tendency, and shrugging the shoulders expresses patience and the absence of any intention to resist. Respectful people do not resist authority, and veneration leads to reverence for superiors in rank. The reader might be disposed to conclude from this that the French must be an eminently religious people, and in no way disposed to resist authority, since they are much given to shrugging their shoulders. It is, to say the least, doubtful whether holding the hands together as a sign of submission is an innate action. It seems to have originated in the East, where vanquished combatants held out their hands together as a sign that they were ready to submit to be bound, a gesture often represented in the Assyrian sculptures. Following Mr. Hollander's argument, one would think that the organ of combativeness would be near the motor centres of the hands and feet, but the phrenologists placed it behind the ear.

Mr. Hollander observes that the outward sign of a joyous emotion is a drawing up of the corners of the mouth and eyebrows, and the motor centres for the corresponding muscles is near what the phrenologists called the organ of hope; now hope is allied to cheerfulness. General paralysis—almost invariably associated with a feeling of optimism—often begins with trembling at the corners of the mouth and outer corner of the eye. General paralysis thus turns out to be a morbid affection of the organ of hope, causing the characteristic trembling of the muscles, as well as the insane delusions of grandeur.

Mr. Hollander will have it that Dr. Ferrier has discovered the gustatory centre in the tip of the lower temporal convolution, although Ferrier himself is doubtful. Mr. Hollander seeks to identify this with the organ of alimentativeness, which is indeed not far off, though placed higher up in Combe's phrenological chart. It is somewhat awkward that Gall neither admitted hope nor alimentativeness, though they were recognized as organs by the later phrenologists. It is singular that Mr. Hollander has missed the only good point which Gall really made. He placed the organ of language in the orbital portion of the brain, and his disciples, especially Bouillaud, collected a number of pathological cases supporting this doctrine. These observations at last led to the discovery of Dax and Broca, fixing the centre for spoken words in the left third frontal gyrus, in the neighborhood of the place indicated by Gall.—*British Medical Journal.*

CASE OF RINGWORM OF THE BEARD, SHOWING THE NECESSITY FOR GREAT CARE IN THE DIAGNOSIS BY THE MICROSCOPE.

A shopkeeper from B——— came to me one morning, with the statement that he had got a ringworm on his chin which he had caught, as he believed, at his barber's. He had been to a barber whom he was not accustomed to frequent, and who he thought was sufficiently cleanly. On going to his own barber some three days later, it was remarked to him, "Why, you must have had your chin scalded"; there being two red patches on it. From these there developed very quickly two large definite rings. It was six weeks between the supposed date of his infection and his visit to me. In the meantime patches had occurred all over his chin and front of neck, and they had lost the character of rings, and consisted merely of raised areas which were red, and from which the epidermis was peeling. He had been using various remedies, and had perhaps modified it a good deal by them. Some of the patches did show in an indistinct manner the tendency to become crescentic. On inquiry as to whether he had any special reason to suppose he had been exposed to the infection of ringworm, he said "No." He had kept a boot-shop, and had nothing to do with cattle or horses. He was not aware that there was any ringworm in his family, but said that one of his children, an infant, was suffering badly from eczema. He had been sent to me by a friend of his, a butcher, whom I had cured four years ago, of very bad ringworm of the chin, supposed to have been caught at the same shop.

What I have next to narrate concerns the difficulty and uncertainty which attends the microscopic examination. I pulled a number of hairs out of the patches and scraped off epidermic scales, of which there were plenty. Having treated these with glycerine, they were placed under the microscope, and after ten minutes careful inspection I could not find a single trace of fungus. I told my patient that I thought his case was one of eczema, and not ringworm, but he persisted. "The rings were at first as if you had drawn them with a pencil, simply a ring and nothing in the middle. It must have been ringworm." So I asked which was the part first affected, and carefully pulled out some hairs from it. On examining these (about half-a-dozen hairs, all looking normal to the naked eye), I found in two abundant evidence of fungus. One of these was crammed full with spores, so that I could distinguish nothing else in that part which was affected. Its end was somewhat brush-like, and a few loose spores adhered to its broken fibres. The other hair presented very different conditions. It was fairly transparent, and showed no spores whatever, but branching mycelium in filaments of very great length and in tolerable abundance. In neither case was the root of the hair involved, and in both the cortex, with the smallest possible exceptions, appeared to be sound. In the evening I made a more prolonged examination of the hairs which I had extracted from three different parts of the skin, after long soaking, some in liquor potassæ, some in glycerine. With the exception of the two hairs mentioned, I did not succeed in finding either in epidermis or hairs any trace of fungus. Such a case well illustrates how easily the correct diagnosis may be missed in such cases, and how careful we must be in accepting a negative conclusion, based on failure to discover the fungus by aid of the microscope. The case also shows how rapidly ringworm may spread on the adult skin, the man had not only his chin and neck covered, but patches were appearing on his forearms. The fungus in all respects resembled that of common ringworm, and had the case been allowed to develop, no doubt we should soon have had inflammation of the hair follicles, and a typical example of "parasitic sycosis."—*Arch. of Surgery.*

QUICK PREPARATION OF SURGICAL GAUZES.

H. Helbing suggests in the *Pharmaceutical Journal* the following mode of preparing surgical gauzes at short notice:

Good raw material is of the first importance in preparing gauzes. This should be perfectly free from fat, should have at least thirty threads each way in a square inch, and should weigh about ten drachms to the square yard. This is about the average for good stuff, though if we examine the various gauzes on the market we shall find that only the very best houses furnish a material of this standard. He has examined a number of samples and gives a few of the figures:

Samples.	Weight of square yard.	Number of threads per square inch.
1	12 drachms.	44 x 44
2	10 "	31 x 31
3	7 "	15 x 15
4	6 "	17 x 17
5	5½ "	26 x 26
6	5 "	27 x 17

Gauze sold by measure is sold on an entirely wrong principle, as, unless the buyer knows the weight and the number of threads, he cannot tell what he gets for his money. If the samples given were all made into 10 per cent. iodoform gauze, Nos. 1 and 2 would contain nearly double the amount of iodoform in each square yard of any of the others, and if, when finished, they were charged at double the rate of the others, it would only be a fair price. This shows how important it is when procuring such articles to ascertain the weight of the gauze and the number of threads. Of course the gauze should also be tested to see that it contains the percentage of antiseptic claimed.

Gauzes are usually kept ready by the instrument-makers, but it may sometimes happen that a medical man may want a gauze for a case of emergency. In such urgent cases it is an advantage to be able to prepare the gauze one's self, and this can be done in a few minutes by following these directions :

Take the necessary quantity of raw material and weigh out a corresponding amount of the antiseptic. Saturare the material with ether or a mixture of alcohol and ether, in which the antisepti has been dissolved, one ounce of the material requiring about three ounces of liquid; wring out the gauze several times and again saturate it, so as to insure uniform impregnation, and dry by simply unfolding it and shaking a few times. It is then ready for use.

In this manner all the different gauzes may be prepared—carbolic, corrosive sublimate, iodoform, thymol, eucalyptol, or any other.—*American Druggist.—Medical and Surgical Reporter.*

CURRENT NOTES.

Ammonia is suggested as a restorative in cocaine poisoning.

Iodine and the iodides yield precipitates with the alkaloids.

Dr. Voigt's Vaccine und Variola, translated, appeared in N. C. M. J. December, 1882.

Acetanilid is soluble in lactic acid upon boiling, but it recrystallizes on cooling; in the dense lactic acid it remains in permanent solution.

Antipyrin and Chloral.—The union of these two chemicals makes an entirely new substance which has none of the therapeutic qualities of either chemical.

Lime as a disinfectant of fecal matter (*Medical Record*, *Therap. Gazette*) is superior to chloride lime or corrosive sublimate. Fecal matters should be treated in liquid state by lime solution, or milk of lime.

Alum in Dysentery.—Half ounce of alum in ten ounces of water, used by enemata night and morning, gave good results (*Therap. Gazette*) in a case of dysentery that had resisted other treatment.

True angina pectoris can be greatly ameliorated and almost always cured by the continued use of the iodides, especially by the use of the iodide of sodium, in a daily dose of forty-five grains.—*Medical Times.*

Saccharin in cystitis (*Therap. Gazette*), if given in small doses, by the mouth, corrects the putrefaction of urine. A good thing to know when one has an elderly patient with enlarged prostate and ponded ammoniacal urine.

Cost of the Influenza in Great Britain.—We note in the *British Medical Journal* a statement that the influenza cost in Great Britain $10,000,000 (£2,000,000), one-half of which was paid by insurance companies, and the other half caused in loss of wages.

THE Medical College of South Carolina has adopted a three year's course of instruction as necessary to the obtainment of its diploma, and there are other Southern colleges that must move in that direction, or only get patronage from the few States that have no Board of Examiners.

SOME of the medical organs of the minor medical colleges in the country are discussing State Boards of Examiners as though they were on trial. It is not too late for them to learn that these Boards now have the medical colleges on trial, and they must either send out better educated men or their occupation is gone.

"AQUA LIMI."—We shall not cease to regret that the promoters of the license law in forming the bill did not know of the case of Dent vs. West Virginia given in this issue. It would have made it possible to have framed a law without any bias as to its retroaction. What a pity! for here is one of the "amnestied brothers," let into good company of regular physicians, who gives the humorous and sly druggist a chance for guffaws of laughter in his back room over a prescription for "Aqua Limi." It is too bad to print this, but it is true.

FORMAL OPENING OF THE BIOLOGICAL BUILDING OF THE UNIVERSITY OF TORONTO.—We acknowledge the receipt of a handsome pamphlet with an illustration of the new Biological Department of the University of Toronto. It is a handsome building, commodious, and arranged upon the most approved plans for the advanced teaching of biology. We congratulate our neighbors upon this advance, for it means more than the mere acquisition of a new laboratory, it is an exponent of the kind of scholarship and training which is at the back of it all.

ANTISEPTIC POWER OF COFFEE.—Dr. Lüderitz has recently made a number of observations on the destructive power of coffee upon various microbes. He found that the organisms all died in longer or shorter periods, e. g., in one series of experiments anthrax bacilli were destroyed in three hours, anthrax spores in four weeks, cholera bacilli in four hours, and the streptococcus of erysipelas in one day. It was, however, remarkable that good coffee and bad coffee produced precisely similar effects. He believes that, as previous observers have suggested, the antiseptic effect of coffee does not depend on the caffeine it contains, but on the empyreumatic oils developed by roasting.—*London Lancet.*

Carmine Urine.—One of the discolorations of urine not noted in works on urinary chemistry, and which we rarely meet with, it is well enough to note. Eating the fruit of *Opuntia*, commonly known as prickly-pear, imparts to the urine the carmine color of cochineal. The writer's attention was first called to this by a statement made in the "Natural History of North Carolina," by John Brickell, M.D., 1737, p. 23. The quotation is: "The Sunflower, the Indian-Figg, or Prickly-Pear, the fruit of this vegetable is frequently eaten, and is very sweet and luscious, but occasions such a high Tincture in the Urine, that it seems like pure Blood; by which means several persons that have been unacquainted with its effects, have been so surprised, that they expected nothing but immediate Death; yet it does no manner of harm, and as soon as its Operation is over, which is in less than twenty-four hours, the Urine resumes its natural color."

Peroxide of Hydrogen for the Relief of Bites from Venomous Insects.—Dr. Phillipe Ricord, of Newark, N. J., writes: "Recently, while charging my atomizer with the full strength of fresh standard Marchard preparation of peroxide of hydrogen, at the bedside of a child suffering with diphtheria, my attention was attracted by the patient's mother, who appeared in pain, and stated that, while taking up a blanket to wrap about her child, she supposed she had been pricked by a needle, and, on further examination, discovered a hornet between the folds she had touched. Thereupon I immediately directed the peroxide of hydrogen spray into the wound, the surrounding tissues, in the few seconds that had elapsed, being swollen to such an extent as to distinctly mark its site. Instantly all pain ceased, and the swelling rapidly disappeared. In this case the wound was still sufficiently open to readily admit the peroxide of hydrogen, and the destruction of the virus was, apparently, in a moment so completely accomplished that no further treatment was afterward required. May we not, therefore, infer that it is quite possible to annihilate many other poisons likewise, by the prompt application of so powerful, yet safe, an agent as the peroxide of hydrogen?"—*Medical Record.*

SULPHUR FUMIGATIONS to be effectual should be assisted by a plentiful supply of steam, or previously wetting the fabrics to be treated.

PANBOTANO (Calliandra Houstoni) is another candidate for favor as a remedy for malarial fever. Its claims are not authenticated. Quinine is too cheap now to tempt us to try new herbs.

THE American therapeutics have the best of it, in asserting that chloroform poisoning causes cardiac failure, in opposition to the teaching of the Hyderabad Chloroform Commission, who claim that it is a respiratory paralysant.

REVISION OF THE U. S. PHARMACOPŒIA.—The Convention for the revision of the U. S. Pharmacopœia will take place in Washington May 7. The delegates from the Medical Society of North Carolina are Drs. Thomas F. Wood, Julian M. Baker and Robert S. Young. The Southern States so far represented by presentation of credentials are, Maryland, Kentucky and Texas. Little attention has been given to this important movement by Southern colleges, or State Medical or Pharmaceutical Societies, and, as usual, we fear, the burden of the work will fall upon the pharmacists and chemists of the country north of the Potomac.

"THE MANDRAKE."—The true mandrake root, *Mandragora officinalis*, known in Hebrew as *dudaim*, or love fruit (reference to Genesis, Chap. xxx, v. 14, 15 and 16), is figured in the *British Medical Journal.* It is a remarkable specimen, having the appearance of a man with long beard, in front view, and in back view remarkable resemblance to the human figure, with legs and arms. It was this close resemblance to the human form, according to the old doctrine of correspondences, caused it to be valued as a love philtre. The plant belongs to the Solanaceæ. Dr. Richardson has recently made a preparation from *Mandragora* which he believes to be the first since the thirteenth century. It produces anodyne effects, some local anesthesia, and when chewed numbs the tongue. This plant is one that has had much written about it, and all that now remains is that our enterprising friends, Messrs. Parke Davis & Co., prepare a fluid extract of it for further experiment. It is only necessary to give this hint to them.

Ergotine, applied to the skin with a camel's hair-brush, is said by Dr. George C. Kingsbury to effect a rapid cure of erysipelas.

For Albumen in the Urine, trichloracetic acid, made by action of chlorine on acetic acid, is a new reägent. It gives a cloudy uncolored zone when albumen is present.

Treatment of Chronic Ringworm.—Mr. Jonathan Hutchinson says that after the trial of many other remedies he has settled down in tolerable content upon an ointment, the efficacy of which depends chiefly upon chrysophanic acid. Liquor carbonis detergens (Wright's) is used as a wash, in the proportion of a teaspoonful to a pint of hot water. With this the scalp is to be well washed twice a week, and all scales and crusts removed. The hair is to be shaven or cut close. The ointment, which is to be rubbed in more or less freely, according to its effect, night or morning, or at night only, is composed as follows:

℞.—Acid chrysophanic	1 dr.
Hyd. amm	20 g.
Lanoline	1 dr.
Adip. benzoat	6 dr.
Liquor carbonis deterg	10 m.

Misce. Fiat ung.

If freely used the ointment causes redness and swelling of the scalp and occasionally œdema of eyelids and face, but it has only this latter effect when too freely used. The child should wear a linen cap, and then there is but little inconvenience from staining. Mr. Hutchinson says the secret of success consists in the patient continuance of the remedy. In the rapid cure of chronic ringworm he has no faith. In all these the fungus has got into the hair-bulbs and walls of the follicles, and can be only killed by perseverance. Mr. Hutchinson has never seen a case in which chrysophanic acid, carefully and well used. did not keep the disease in check whilst it was employed. The error consists in leaving it off too soon. When the case appears to be cured, and the hair is allowed to grow, a weaker ointment should still be used twice a week over the whole scalp, to prevent relapse. For this purpose ten grains of the acid will suffice, the other ingredients remaining the same. It should be continued regularly for six months without interruption. Epilation, as so patiently practised in the Hôpital St. Louis in Paris, is a very valuable aid in the treatment of ringworm. Mr. Hutchinson, however, says it is so troublesome that he is usually content to have the scalp shaved once in ten days. He says that it is important that the ointment should be rubbed occasionally all over the scalp, as well as into the patches themselves. Kerion presents almost the only phase of ringworm for which Mr. Hutchinson varies his prescription. In it epilation and the use of a strong evaporating lotion (lead and spirit) he considers the best plan. When ringworm prevails in a family or school, Mr. Hutchinson says it is important to use oils or pomades for those not affected, since to keep the hairs greasy is an efficient means of protecting them, and the same measure probably is useful in preventing the spread to other parts of the scalp in cases in which a few patches only are present.—*Archives of Surgery.*

THE TREATMENT OF COMPOUND DISLOCATIONS.—The treatment of compound dislocations has been wonderfully successful of late years, and that, too, even in reference to the largest and most important joints. It is not so long since a canon of surgery was well-nigh established; "that a compound dislocation of the ankle-joint ought to be treated by an immediate amputation of the limb." I remember seeing it done when a student in one of our London hospitals in the case of a young and healthy man, and one, too, in which no complication existed. Permit me to relate a case illustrating the modern rule that all such cases are to be treated without sacrifice of the limb. Two plans of treatment are at present in use with this object. The one which consists in the exclusion or destruction of germs (the antiseptic); and the one which, by the systematic use of cold aims at preventing inflammation (the antiphlogistic plan). I will say nothing now of the Listerian or antiseptic method of dressing, further than that in referenc to compound dislocations only, it may probably count by thousands the number of limbs that have been saved. My own experience, both in hospital and private practice, has led me to prefer, as being more certain in its results, a modification of what may be called the antiphlogistic plan. With it I have treated many cases of compound dislocation, usually with fracture, into the elbow, ankle and knee, not to mention smaller joints. The case which I am about to narrate shall be only a fair specimen of results. I was called one summer evening, some years ago to see a medical man, who resided about eight miles from my house, and who had been thrown from his horse. Two or three hours had elapsed between the time of the accident and my getting to him. During the whole of this period his astragalus, the under surface of which was completely extruded. from the wound, had been exposed to the air. The case was one of compound dislocation of 'the rest of the tarsus from the astragalus with a large laceration on the inner side of the ankle. Having had the foot washed and the bones sponged with the spirits of wine and water, I succeeded, under the influence of an anæsthetic, in putting the parts into place. The limb was then placed on a back splint and wrapped from the toes upwards with strips of lint soaked in spirits of wine and lead lotion. A nurse was deputed to the duty, unintermitting night and day, of keeping the lint constantly wet. My directions were that the skin of the limb was not to be allowed to become warm, and that if the slightest approach to warmth of limb was noticed more spirit was to be added to the lotion. Large gallon bottles of the lotion were supplied, and the nurse instructed to pour it on as if it were water. Its strength was one of spirit to three of water. The result was that the ankle never inflamed in the least, that the wound healed without secretion, and that the patient was walking about—I believe I may almost say riding—at the end of six weeks. By the use of the spirits of wine in this manner I believe that the surgeon has the development of inflammation in an injured joint absolutely under his own control. By sedulous night and day attention to keeping the part cold for a week all risk may be avoided. Many successes have, of course, attended the use of cold by other methods—the ice-bladder, for instance; but I am sure that none are so convenient or so trustworthy as the plan which I have described. Not only is it useful for compound dislocations, it is far the best for compound fractures also; though in the latter, where there is much injury to soft parts, it is necessary to use a little caution lest gangrene be induced. I have, I fear, wandered a little from the immediate matter in hand, which was to assert that the present surgical canon is to save the limb in all cases of compound dislocation or compound fracture into joints unless they be attended by exceptional complications.—*Archives of Surgery.*

THE reaction against sulphonal has set in, but the trade-mark proprietors turned a large amount of it into gold whilst they had the run.

BILLINGS' NATIONAL MEDICAL DICTIONARY has been received from the publishers and will be noticed in our next number. All that mature scholarship and an experience with the sort of reference books needed by studious doctors has been presented in these handsome volumes.

DETECTION OF PUS IN THE URINE.—Drop into the specimen of urine enough tincture of guaiac to give it a milky appearance, and heat it a few minutes to 100° F. If pus is present a blue tint will develop. Otherwise the urine may be passed through a white filter, on which is then allowed to fall a few drops of tincture of guaiac, producing, if pus is present, a distinct blue discoloration.—*Pharm. Era.*—*Memphis Medical Monthly.*

QUININE AND ANTIPYRINE, when mixed, are soluble in water without addition of acid. It was suggested to use the solution for hypodermic use, but Greuel (*Ap. Ztg.*,) found that the solution does not give the thalleiochin reaction, which leads him to believe that the quinine suffered chemical decomposition, and that the therapeutic action of the solution may be of a different nature than quinine alone.—*Pharmaceutical Record.*

THE PERIOD FOR SURGICAL INTERFERENCE IN ACUTE INTESTINAL OBSTRUCTION.—The conclusions of the author are summarized as follows: 1. That in all cases the use of milder measures, such as purgatives, enemata and massage, may be safely carried out until the supervention of fæcal vomiting. 2. That as soon as this is established an exploratory incision into the abdomen should be made without delay. 3. That obscurity of diagnosis in presence of this symptom ought not to stand in the way of an operation. 4. That clinical experience has taught that there is very little chance of recovery when once stercoraceous vomiting has begun, unless an operation be performed. 5. That symptoms of collapse are not a contraindication to operative interference.—Dr. Richardson, in *Brit. Med. Jour.*—*Weekly Medical Review.*

To Guard Against Tuberculosis.—Orders have been given the Prussian army surgeons to measure the chests of recruits every four weeks. All are to be regarded as narrow-chested, the circumference of whose chests is less than half the length of their bodies. Narrow chested men, whose bodies are not widened by drill, are to be regarded as predisposed to tuberculosis, and to be discharged as soon as possible lest they infect healthy soldiers.—*Weekly Medical Review.*

Stuffing the Newspapers with Medical Learning.—During the late influenza epidemic in Edinboro' the lay press, as elsewhere, published with avidity anything bearing on the subject: "Interviews with Leading Medical Men" occupied much space. Somebody succeeded in "stuffing" the *Evening Dispatch* with the following information, which was gravely published: "There are a good many complicated cases occurring, such as intercostal neuralgias and severe head pains, but the most serious of those are where the throat symptoms are associated with (in the male) salpingitis, which necessitates either tracheotomy or hysterectomy. If hyposdiasis occurs, it may be well to give iron in large doses, but if a rupture of a Graafian follicle supervenes it may be serious, or even fatal. This last complication is believed to be due to an organism not belonging to the bacteria, but like them not containing chlorophyll.—*Boston Med. and Surg. Jour.*

A Thousand Years of Syphilis.—Virchow's Archives give an account of syphilis as known to the Japanese. It is from a well preserved manuscript of 808, found in a temple in 1827. It is of pure Japanese origin, written in Chinese characters, but not saturated with Chinese notions or philosophical speculations. There are one hundred chapters, the ninety-fourth and ninety-fifth devoted to syphilis. The bubo, the chancre, the edema, the preputii, the phagedenic chancre, the exanthemata, the bone and joint affections, the ulcers of the fauces, and the grave tertiary lesions, are each described in a few words. Syphilis was regarded as a specific disease; whether the Japs regarded it as a contagious and transmissible by sexual intercourse is not known. The treatment was herbal; the use of mercury this nation has recently acquired from the Europeans. This work affords another evidence that syphilis is as old as human history. Impure affections of the genitals, which can now be only regarded as syphilis, were described by the European and Oriental writers before the middle ages, but the connection between the primary affection and the constitutional symptoms was not suspected until the beginning of the fifteenth century. This work, dating back a thousand years, only recently known in Europe, is an important contribution to the history of syphilis.—*Indiana Medical Journal.*

Placenta Prævia—Previous Rupture of the Uterus—Recovery.—A complex midwifery case is recorded by Dr. Deutsch in a recent number of the *Centralblätt für Gynäkologie.* The patient was aged 23. Four years previously rupture of the uterus was caused by a fall during the eighth month of pregnancy. The fœtus had completely passed into the peritoneal cavity; it was delivered by abdominal section. Severe complications ensued, vomiting, fever, utero-abdominal fistula, and suppuration between the uterus and the parietes. When Dr. Deutsch attended her she was in labor at term. Between the umbilicus and pubes was an extensive brown discoloration of the integuments, bearing several prominent cicatrices. The parietes were exeeedingly thin and prominent. On vaginal examination the cervix was found so high and short that it could hardly be touched; the promontory of the sacrum was easily reached, and the pelvis was contracted in all its measure ments. The symptoms of placenta prævia were present. Chloroform was given and turning performed after manual dilatation of the cervix. Severe flooding immediately followed delivery; the membranes were at once extracted. Free bleeding continued; it was traced to a laceration of the cervix and rupture of the perineum. The uterine and vaginal cavities were plugged with iodoform gauze. Slight febrile action followed during convalescence. The patient left the hospital quite cured on the thirty-seventh day. Professor Leopold has recently insisted strongly on the necessity of abdominal section in cases of rupture of the uterus, not only as an inflexible rule when the fœtus has escaped into the peritoneal cavity, but also when it has been delivered naturally, yet signs of hæmorrhage continue. Too often in such cases a trifling amount of external hæmorrhage may signify very severe bleeding into the peritoneum. Unfortunately, abdominal section is very trying to the inexperienced, especially in the course of a midwifery case, and sewing up a uterine wound is at least as difficult as Porro's operation.—*Brit. Med. Journal.*

DIAGNOSIS AND TREATMENT OF ANEURISM OF THE AORTA.—Powell (*Lancet,* January 4, 1890) says that though pathologically aneurisms are still divided into the fusiform and sacculated forms, *clinically* the phenomena characteristic of aneurism are scarcely ever observed except in the latter variety. It would be a fatal mistake to treat the fusiform aneurism—"false aneurism," from a clinical point of view—according to the methods which are indicated in the case of the true sacculated aneurism. The fusiform dilatations usually occupy the first portion of the aorta, seldom produce pressure symptoms, have no tendency to rupture, are usually associated with valvular lesions of the heart, and demand the treatment appropriate to heart diseases. The essential phenomena of sacculated aneurism are primarily those derived from the pressure of a tumor on surrounding parts, and secondarily those indicating that it is a vessel tumor. The author relates several cases illustrative of the importance of laying the greater weight on the presence of signs of pressure, rather than on such symptoms as bruit, thrill, and the like. According to his experience, about one-half of the cases of sacculated aneurism are without any murmur, and many of these never develop any to the end of the case. A systolic murmur, heard over an area remote from the heart, such as the dorsal or supra-spinous regions, is, however, of great diagnostic value, but not positively convincing, as morbid growths may sometimes produce the same symptom. A diastolic murmur is rarer, but is absolute proof of intra-arterial disease. Thrill is a comparatively rare sign, while it is common in spurious cases. It, with loud systolic and sometimes diastolic aorta. But the situation of the signs near the aortic orifice, and the absence of pressure signs, will generally distinguish the condition from the sacculated aneurism.—*The American Journal of the Medical Sciences.*

THE DIFFERENTIAL DIAGNOSIS OF VACCINATION SYPHILIS.—The *Deutsche med. Zeitung* of July 18th, 1889, reproduces a summary of Professor Fournier's clinical lectures on this subject by Dr. P. Portalier. The lines of distinction between syphilitic and other appearances are drawn with equal clearness and elegance by the

French syphilologist. I.—Differential diagnosis between vaccinal ulcers and primary chancre: The latter never develops before the fifteenth day after vaccination, the time required being mostly three weeks; twenty days after inoculation it is still in its earliest development. A "vaccination ulcer" is present, if ever, twelve or fifteen days after vaccination; after twenty days it is fully developed. The clinical differences are as follows: In the case of vaccination ulcer, (1) all the pustules are affected as a rule; (2) much inflammation and ulceration; (3) deeply-excavated ulcer; (4) much suppuration; (5) irregular margin as in soft chancre; (5) floor of ulcer uneven, suppurating; (7) inflammatory induration; (8) inflammatory, erysipelatous areola; (9) gland swelling none, or less inflammatory; (10) complications often present, sloughing, erysipelas, etc. Syphilitic ulcer: (1) Is restricted to one or a few pustules; often these do not develop; (2) the inflammation is slight; (3) the loss of substance is superficial; (4) suppuration is scanty or absent; crusts form; (5) border not notched, slightly elevated, gradually lost in floor; (6) surface of floor smooth; (7) the "parchment" induration is specific, not merely inflammatory; (8) hardly any inflammatory areola; (9) gland swelling constant, indolent; (10) complications rare. II.—Differential diagnosis between vaccination rashes and secondary syphilitic eruptions: Under the former are comprised roseola vaccinalis, miliaria vacc. vaccina bullosa and hæmorrhagica, also accidental rashes, rubeola, scarlatina, lichen, urticaria, etc. A true vaccinal rash (1) appears between the ninth and fifteenth day after vaccination; (2) absence of inoculation chancre; (3) eruption has not syphilitic characters; (4) is attended with fever; (5) is evanescent. A secondary syphilitic eruption (1) appears, at the earliest, nine or ten weeks after vaccination; (2) requires the preëxistence in every case of a specific ulcer at the site of vaccination, that is, to constitute the rash due to vaccination; (3) shows the characters of true specific eruptions; (4) is not attended with fever; (5) lasts a long time; (6) is accompanied, as a rule, with specific appearances on the mucous membranes. III.—Differential diagnosis of vaccination-syphilis from hereditary syphilis, which may show itself about the time of vaccination: Vaccination syphilis (1) begins with a local affection, chancre and indolent bubo; (2) has a typical development in four stages, namely, incubation, chancre, second incubation, generalization (secondary rashes, etc.);

(3) never appears earlier than the ninth or tenth week after vaccination. Hereditary syphilis (1) has no chancre, but begins with general phenomena; (2) has no typical development after vaccination; (3) is wholly independent of the latter as to time; (4) is attended by the habitus syphiliticus, or syphilitic bodily aspect; (5) other manifestations of hereditary lues may be present; (6) the history may indicate syphilis. The only point in the above admirable summary requiring correction is the statement that a secondary syphilitic rash is not attended by fever.—*British Medical Journal.*

We regret to have to add to our note on the foundation of the Biological Laboratory of the Toronto University that it was destroyed by fire before it was occupied. We trust that this may be the forerunner of a still completer establishment in the near future.

Steel Portrait of Dr. William George Thomas.—We take pleasure in announcing that the best photographs of our deceased friend are in the hands of Mr. J. J. Cade, one of the best steel engravers, we are assured by competent judges, in the country, and that he expects to complete the portrait early in May. The senior editor of the Journal has the entire matter in hand, and, in order to secure the largest distribution of this portrait among the numerous friends of Dr. Thomas, he has put the price of the engraving at 50 cents.

Acne and Diseases of the Nasal Cavity.—Dr. Carl Seiler presents his views in the *Journal of the A. M. A.* on the relations existing between these affections. According to him, "acne punctata is almost always associated with atrophic rhinitis, while acne rosacea is almost always associated with hypertrophic rhinitis." He believes that impulses originating in the erectile tissue over the turbinated bones are communicated by way of Meckel's ganglion, the Vickain nerve and the nervi Molle's of the sympathetic, to the sup. cervical ganglion, and thence, as reflexes, exert a vaso-dilator effect on arterial branches distributed to the skin of the face. Dr. Seiler has cleared up many cases of acne by treating the intra-nasal conditson.—*Weekly Medical Review.*

READING NOTICES.

In a case of Acute Neuralgic Headache I used Peacock's Bromides with complete success, and find it to be the best nerve sedative prepared. F. F. Henwood, M.D., Thompson, Pa.

J. M. Ritter, M.D., Richmond, Ia., says: "My experience with S. H. Kennedy's Extract of Pinus Canadensis has been highly satisfactory, especially in the treatment of gonorrhœa and gleet. In one obstinate case of gleet, particularly, I obtained the very best results from the remedy as an injection; the case was one of six months standing, the patient had consulted other physicians, but with negative results. I prescribed the Pinus Canadensis (White) as an injection, properly diluted. The malady yielded immediately, the discharge lessened, and finally yielded entirely, to the great delight of the patient."

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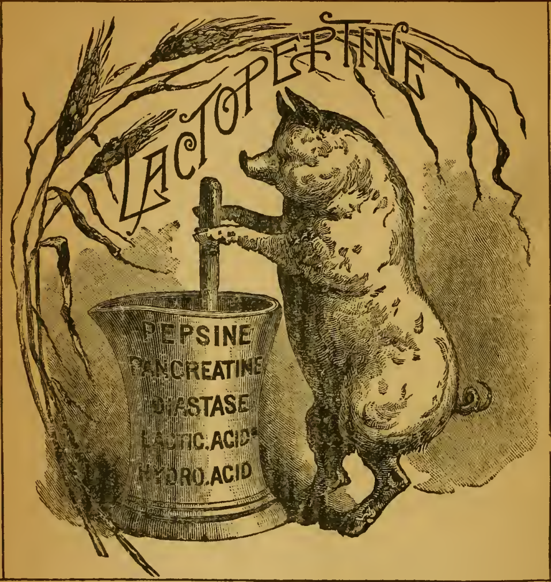

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NORTH CAROLINA
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AN EPIDEMIC OF MEASLES, WITH REMARKS ON RÖTHELN.

By Charles W. Townsend, M.D., Boston. (Read before the Obstetrical Society of Boston.)

During the three months beginning the last of February and ending the first of June, 1888, I attended, in a dispensary district, covering a small area at the North End of Boston, 76 cases of measles, a consideration of which, with special reference to their resemblance to rötheln, may perhaps be of interest.

Of the 76 cases, 72 had never had measles before; 4 had had it once before. The latter were three boys and one girl, aged, respectively, five, four, one and a half, and five years. The ages of the

72 cases who had measles for the first time were as follows: Four months, 1 case; six months to one year, 9 cases; one year, 8 cases; two years, 13 cases; three years, 5 cases; four and five years, 19 cases; six to ten years, 13 cases; over ten years (the oldest being twenty-one years), 4 cases. Twenty-nine were male; forty-three were female.

Living in the same room with these, in fact, nearly always sleeping in the same beds, and therefore thoroughly exposed to the contagion, were 73 other children who did not contract the disease at this time. Of these, 66 had had measles before, 27 boys and 39 girls; 3 of these having had it twice, while 7 had never had it before—5 boys and 2 girls. The ages of the latter were as follows: Four months, 2 cases; one year, 1 case; three years, 2 cases; eleven years, 1 case; thirteen years, 1 case. Of the 66 cases who had had measles before, 1 was two years old, 1 three years, 1 four years, 23 between six and ten years, and 40 were over ten years of age. In other words, 149 children in all were exposed to contagion; of whom 79 had never had measles before, and all but 7 took the disease; while of 70 who had had measles before, 3 having had the disease twice, only 4 were again attacked. Thus, of 149 children, 7 had measles twice, and an equal number escaped the disease. One family, in which there occurred 2 cases of measles, the rash being out from the 22d to the 26th of April, moved out of their tenement of two rooms on the 10th of May, and a second family moved in on the same day, no very thorough cleaning and no fumigation having taken place. In the second family were 2 children, aged nine and six years, who had measles, and 2 aged two and a half years and six months, who had never had measles, and none of them acquired the disease.

In another family a child of four years had measles, beginning on the 2d of March. A baby was born March 23, in the same room, no disinfecting precautions having been taken; but the baby did not acquire the disease. Flint states that the susceptibility to this disease is very slight during the first six months of infantile life. As has been shown, there were three babies, four months old, exposed to measles: one took it and two escaped; while of ten, between the ages of six and twelve months, all but one was attacked. All of the infants under one year of age were at the breast, with one exception; but, as is the custom among the lower classes, it is probable that all obtained occasionally more or less of artificial food.

Although I was obliged to go frequently from cases of measles directly to other families who had not had measles, without taking any disinfecting precautions, in no instance, as far as I am aware, did I convey the disease.

It was impossible, in some instances, to determine the duration of the stage of incubation. In 42 cases this could not be discovered; most of these having taken the disease in some unknown way, probably at school, from contact with clothing from infected houses, or while visiting at their neighbors. The mildness of some of the cases allowed the children to play about the house even during the stage of eruption. Where a second case or a group of cases occurred in a family, after one member had been attacked, the period of incubation was estimated by reckoning the duration of the interval from the first appearance of the rash, in the initial case, to the beginning of the prodromata in the second case, and was found to be as follows in 34 cases :

Duration of Incubation Stage.

Five days in	1 case.	Eleven days in	1 case.
Six "	4 cases.	Twelve "	4 cases.
Seven "	4 "	Fourteen "	1 case.
Eight "	4 "	Fifteen "	1 "
Nine "	5 "	Sixteen "	1 "
Ten "	8 "		

Owing to the great prevalence of measles at this time, it is possible that some of the cases found to have an incubation stage of only five or six days may have been infected elsewhere, and that they really had a longer incubation stage. Those with apparently a long incubation stage, although exposed for that length of time, may not have become infected till several days had elapsed. Two cases in the same family were apparently infected by a visitor, whose own child was suffering from measles. Here the incubation stage lasted from ten to fourteen days.

Of the duration of the prodromal stage a more complete record was possible. In 10 cases only it could not be determined; in the remaining 66 it was as follows :

Duration of Prodromal Stage.

No prodromes in	5 cases.	Three days in	28 cases.
Half a day or less in	3 "	Four "	4 "
One day in	9 "	Five "	3 "
Two days in	13 "	Six "	1 case.

Thus, in 17 cases the prodromal stage was not longer than twenty-four hours in duration.

A full description and analysis of the symptoms is not attempted here; but to a few points I wish to call special attention, as many of the cases presented appearances and symptoms which strongly suggested cases described as rötheln.

Vomiting during the prodromal stage occurred in but a few cases; being noted in only six; and in some of these it was probably induced by the mother's attempt to administer the gin and saffron, which is thought by them necessary to bring out the rash.

Catarrhal symptoms, namely, coryza, conjunctivitis and cough were present in all cases, but were usually very mild. During the prodromal stage, if such were present, these were especially mild, and in a number of cases conjunctivitis did not appear until the rash showed itself. In one case the slight conjunctivitis began when the rash was fading. In many of the cases redness of the conjunctivæ was hardly noticeable, and in two cases I noted that there was no injection of the membrane. Cough was severe in five of the cases; slight in the remainder.

Diarrhœa was noted in four cases. In six cases there was slight sore throat. The cervical glands were found slightly swollen and tender in six cases; in two others they were swollen but not tender.

Fever was slight in many of the cases, as shown by the general good condition of the patients, and by the fact that it was difficult to keep them in bed; and the temperature was rarely found as high as 103°. In one case the temperature on the second day of the eruption was 99.4°; on the third day, when the rash had come out thickly, it was 100.4°, a temperature which would suggest rötheln rather than measles—moreover, the child had had measles before. The rash in this case, however, was the typical measles rash with confluent and crescentic-shaped lesions.

In 16 cases the rash was profuse; in 47 cases moderate; in 10 slight, and in 3 very slight. The duration of the rash was noted in

25 cases, and was found to be as follows: Two days in 3 cases; three days in 6 cases; four days in 8 cases; five days in 4 cases; six days in 3 cases; seven days in 1 case. Desquamation was often absent or very slight.

The character of the efflorescence varied greatly. In several cases the efflorescence made its appearance simultaneously on the face and trunk; in three cases it appeared first on the abdomen, and in one case first on the thighs. In all other cases the temples and face were the first regions affected, the rash spreading sometimes within a few hours, and sometimes not for over twenty-four hours, over the whole body. As a rule, twenty-four hours were occupied in this process. The rash was noted in several cases to be much more profuse on the face than on the body. In one of the cases, where the rash appeared first on the abdomen, the skin of the whole body was affected, with the exception of the forehead and face. Not only was the typical measles rash seen with its deep-red macules and papules, confluent in places so as to form irregular and crescentic groupings, but also cases were seen where the rash was of a paler red and in the form only of macules and papules scattered diffusely over the skin. The "slight" and "very slight" cases of rash, tabulated above, represented this latter class. In one case, on the other hand, where the rash was very intense and confluent, the left hand and forearm, on the second day of the eruption, was covered with a bright erythema, on which papules the size of a split pea appeared almost white; on the following day the erythema had faded, and the papules were red.

Of the 76 cases, one, in a baby of seven and a half months, was complicated with acute lobar pneumonia of the right apex, which began on the third day of the prodromal period, the day before the appearance of the rash, and ran a favorable course; the temperature dropping to normal on the fifth day of the pneumonia. The rash came out well, lasting three days. Another case, a girl of two years, was complicated with broncho-pneumonia, and died in twenty days from the onset of the measles. This was the only fatal case.

To sum up: We have considered here a mild epidemic of disease, many of whose cases closely resembled the description given of rötheln, while others were typical cases of measles. As these two diseases are believed to be entirely distinct, and as cases resembling the one were seen to give rise to cases resembling the other, it is evident that the epidemic consisted in reality of only one disease, and that the other was merely simulated. Was this epidemic, then, one of measles or of rötheln? But before answering this question another presents itself, namely, Does rötheln exist as a distinct disease, and if so, what is its symptomatology?

In reading the descriptions of the rötheln, by various authors, and the accounts of epidemics of this disease, one is impressed with the fact that, in some cases, at least, the epidemics are evidently those of measles, occasionally of scarlet fever. The statements and descriptions are often contradictory, and that which is considered diagnostic by one writer is not even observed by another. The particular epidemics are seized upon by the writer under whose observation they have fallen as the type of the disease, and his description is framed accordingly. Among the older writers, especially, epidemics called rötheln were described where the disease ran a violent course, and the mortality in some cases was high; but more recent exponents have almost all conceded that rötheln is a very mild disease, scarcely ever fatal.

Briefly, rötheln is described as an infectious disease, with an incubation stage variously put at from one to three weeks, whose prodromal stage is often absent, or of only twelve to twenty-four hours duration. The rash, which lasts from two to four days and is followed by little or no desquamation, begins first on the face, and, although sometimes resembling the rash of scarlet fever, generally resembles that of measles, consisting of scattered macules and papules, which seldom become confluent, as in measles, and are generally of a lighter red color. Catarrhal symptoms of the air-passsages and conjunctivæ are slight, and the accompanying fever is also slight. A mild sore throat and enlargement of the glands behind the ear and in the back of the neck are stated by some authors to be characteristic symptoms, but they have not been observed by others. With the intention of silencing all doubters, Strümpell says: "That rötheln does exist as an independent form of disease can be denied by those alone who have never seen it."

It will be seen that this description of rotheln, which was taken chiefly from Strümpell and from Griffith's account, corresponds in the main with mild cases of measles.

In fact, given a mild case of measles, where the eruption is not abundant, where the catarrhal symptoms are slight, and where the prodromal stage is at the same time short or absent, we have a picture of disease exactly like that described as rötheln. Yet in the epidemic under consideration all grades between this form and the typical case of measles were observed.

Swelling of the glands in the neck and soreness of the throat, said by some to be almost diagnostic of rotheln, although entirely absent in some so-called epidemics of this disease—symptoms which I have noted in some of my cases—have been observed in epidemics of marked and severe measles. Thus, Swift, in an analysis of twenty-nine cases of decided measles with profuse rash, noted enlargement of the cervical glands in all but five, and inflammation of the throat was more marked than is usually the case in measles. It is therefore admitted by Strümpell, and other advocates of the individuality of rötheln, that it may be impossible to make a diagnosis from a single case, and their faith in the separate existence of rötheln is founded on the fact that a previous attack of measles or scarlet fever affords no protection from this disease. As a second attack of measles in the same patient does sometimes occur, it is necessary to have under observation a number of cases before a diagnosis can be made between rotheln and a second attack of measles.

One of the most important contributions to this subject, and one which seems to prove the separate existence of rotheln, is a description by Dr. C. Haig Brown of successive epidemics of rotheln and measles at Charterhouse School, in England. From notes on 159 cases diagnosticated as rotheln, occurring at the school, it was found that

5 had previously had rotheln (?), 154 had not.
144 " " " measles, 15 " "
42 " " " scarlatina, 117 " "

Of the 5 supposed to have had rotheln, none had had measles; of the 15 who had not had measles, 14 contracted measles a few months after their attack of rotheln. In other words, 158 of the 159 cases were twice sick with an infectious disease, one of these attacks being undoubtedly measles; the other, although it resembled measles in many particulars, we must admit was a distinct disease, which is called rotheln, unless we suppose that two attacks of measles in the same individual could occur in so many cases.

An epidemic of measles occurred at the same school five months later, and of 60 cases,

1 had previously had measles, 59 had not.
19 “ “ “ rotheln, 41 “ “
20 “ “ “ scarlatina, 40 “ “

Also very interesting is the fact, noted by Dr. Brown, that about one and a half years before the rotheln epidemic described above there occurred a small epidemic of thirteen cases where the symptoms exactly resembled those of the large rotheln epidemic; but the rash, instead of closely resembling the eruption of measles, was exactly like the eruption of scarlet fever. Five of these had previously had scarlet fever, and not one of them contracted rotheln a year and a half later, although nine were still in the school and exposed to the infection.

However inclined one may be to be skeptical as to the separate existence of rotheln, facts like these are not to be put aside, unless we suppose that in some epidemics, and not in others, measles attacks equally those who have had measles before and those who have not. Have we a right to make this assumption?

To return to my own cases: Of the 76 who were attacked in this epidemic only 4 had previously had measles; while of 73 children exposed to the disease, and who did not acquire it, 66 were protected by a previous attack of measles. Therefore we must conclude that the present epidemic was one of measles.

That the previous attacks were in reality measles, and not rotheln, supposing such a disease to exist, I think there is no question, for most of the children had been sick in an epidemic that began a little over a year before, the undoubted measles character of which I had been able at that time to observe in the adjoining district at the North End.

Of 115 cases of measles, observed at that time, nearly all ran a typical course, with profuse rash and elevated temperature. Four cases died of broncho-pneumonia, two of the deaths occurring within a few days of the appearance of the rash.

Although the general character of this epidemic of 1886–’87 was severe, I have notes of a case which occurred in February, 1887, at the time the epidemic was at its height and in a house near others where typical cases of measles were plenty—a case which closely resembles the description given of rotheln.

Kate L., seven years old, who had had measles two years before, was found one morning, without any premonitory symptoms, covered from head to foot with a measles-like rash, and at the same time cough and conjunctivitis appeared. When seen by me, on the following day, the rash, which had begun to fade, was found to be a macular and papular eruption, the macules being of the size of small peas, and in places closely confluent, so as to form erythematous patches. There was no inflammation of the fauces, and the patient was up and about, feeling moderately well, the temperature being 100.4°. On the following day there was no trace of the rash or of the conjunctivitis, and the temperature was normal.

Being unable to make a diagnosis of rotheln from a single case, and on account of the great prevalence of undoubted measles in the neighborhood, I considered this a mild case of measles, examples of which were so common in the epidemic of 1888. It is interesting here to note that, in the four cases observed in 1888, in their second attack of measles, in one case only was the prodromal stage less than three days in duration. In two cases the rash was slight and the course of the disease mild, in the other two the rash was profuse, and the course of the disease of moderate severity.

At the same time that the mild measles epidemic of 1888 was at its height in Boston, a number of cases of an eruptive disease occurred at the McLean Asylum, in Somerville, near Boston, for the facts in relation to which I am greatly indebted to Dr. Horace M. Locke and to Dr. A. C. Stanard. One of these cases I had an opportunity of seeing through the kindness of Dr. Stanard.

Ten cases occurred at the asylum in March and April, 1888, all but one having had measles before; all were adults. In six of these the eruption was the first thing noted, in the others, prodromal symptoms were slight and of brief duration. The eruption lasted three days in 3 cases, four days in 2 cases, five days in 1 case, and 6 days in 1 case. Swelling and tenderness of the glands in the neck were noted in several. The symptoms in all cases were moderate. The stage of incubation varied from eleven to eighteen days. The only one of these cases that never had had measles was subsequently exposed to undoubted measles, and passed through a typical attack.

The case seen by me, an adult, who had had measles in childhood, felt poorly while in Boston on the morning of March 22, and found at noon a rash appearing on his face. This soon spread over his whole body; he had slight conjunctivitis and slight cough, occasional vomiting, and a feeling of sore throat; his temperature reached 102°. When seen by me, on Maach 24, the patient was covered with a macular and papular eruption, in places confluent in irregular patches, exactly resembling a moderately profuse measles rash. His abdomen showed only a few scattered pea-sized macules; but when exposed to the air crescentic spots appeared, which became more or less confluent, forming a nearly continuous erythema, with little spots of clear skin. The faces were reddened, and a few papules were to be seen on the palate; the tonsils were not swollen. The glands of the neck and groin were slightly swollen and tender. The source of infection for the first case, unfortunately, could not be determined. Measles was then prevalent in Somerville, and it is said that rotheln was also diagnosticated.

Although these ten cases occurred at the time of an epidemic of measles in a neighboring place, the fact that all had had measles, with the exception of one patient, who was subsequently sick with undoubted measles, in connection with the fact that the disease in all was mild, with little or no prodromal symptoms, would lead us to diagnosticate these cases of rotheln.

Let us suppose, however, that only five of these ten cases had had measles before, what diagnosis should have been made? We might say, with truth, that cases exactly resembling these in symptoms were to be seen in Boston in the midst of a measles epidemic, and also that second attacks of measles did sometimes occur, and that, therefore, the diagnosis in this case was measles with an unusually large proportion of second attacks are allowable in an epidemic before we trespass on the ground of rotheln? Such questions make, I think, a *reductio ad absurdum.*

From these somewhat confusing studies I draw the following conclusions—very unsatisfacsory, it is true, as they end with a question I cannot answer:

1. Epidemics of measles occur in which many of the cases exactly resemble cases described as rotheln.

2. That these cases are also found occasionally in severe epidemics of measles.

3. That glandular swellings and sore throat are sometimes found in cases of undoubted measles and are sometimes absent in cases called rotheln.

4. That the symptomatology of rotheln is not distinct from that of measles.

5. That it is therefore impossible to make a diagnosis of rotheln from a single case.

6. That the only ground on which the individuality of rotheln rests is the fact that previous attacks of measles afford no protection from this disease.

7. That as second attacks of measles do occasionally occur, we cannot, from our present knowledge, make the diagnosis of rotheln, unless—as in the Charterhouse and Asylum epidemics—we meet with a series of cases in patients, many or most of whom have previously had measles.

8. That the impossibility of knowing how many second attacks may occur in a given epidemic of measles make this proof of the separate existence of rotheln somewhat problematical, and gives rise to the question, Is it possible that in some epidemics and not in others a mild form of measles attacks equally those who have had measles before and those who have not, and affords afterwards no protection from measles? In other words, is rotheln merely a mild form of measles?—*Archives of Pediatrics.*

SELECTED PAPERS.

DIABETES MELLITUS.

By Dr. ADOLPH KALLEY, Vienna.

HISTORICAL DIVISION.

Diabetes is by no means a discovery of recent medicine. The knowledge of it can be traced far back into the dim past. The first to recognize it appears to have been Susruta, in whose Ayur-Veda ("Book of Life"), we already find quite correct notions concerning the course of diseases of the Kidneys and Diabetes, which is classed by Susruta under Kidney Diseases. "Mellita Urina laborantem quam medicus judicat ille etiam incurabiles dictus est—

omnes urinales affectiones tempore incurabiles fiunt, ad mellitum urinæ statim perveniunt et tunc incurabiles sunt—dulcis fit urina, sudor et phlegma. (as soon as the physician has in a disease discovered sweetness in the urine, thereby its incurability is established. All diseases of the kidneys become after a time incurable, lead to Diabetes, and thereby to sure death. The urine, perspiration and mucus come to contain sugar.) Although since then views have become clearer, and many fallacies have been determined, still we cannot help being astounded at the, for the most part even to this day, correct prognosis; we believe we can with full right, declare Susruta to be the first to recognize diabetes. Among the Greeks and Romans the disease was also known at an early date. Celsus was the first amongst them to mention a knowledge of the disease; after him Areteus, one of the most noteworthy followers of Hippocrates. This one already uses the name diabetes, as in common use. He supposes the stomach to be the seat of disease, a view that was again entertained fifteen hundred years later. In the main, he gives a really brilliant picture of the sufferings of the diabetic. According to him, meat and bone dissolve together in the urine. He compares diabetes with dropsy, only that in the former the water escapes by the bladder. The patients had to urinate constantly, and suffered at the same time with the most terrible thirst. It is not possible to afford relief to the patient. If water be denied him, his mouth becomes quite dry, and an unquenchable fire rages in his entrails. Part of the flesh is also eliminated by the urine, and so torture and consumption combine to lead the patient to unavoidable death. The body becomes leaner and leaner, then the skin becomes dry and wrinkled, and it is not so much the increased amount of liquid alone, but especially the consumption, which inevitably sets in despite the increased appetite, which kills the patient. We here find correctly mentioned the increased amount of urine and excessive thirst. Of the fact that the urine contained sugar neither Areteus nor any other Greek or Roman physician, had any suspicion. Lastly, we find diabetes mentioned by Claudius Galenus, who also considers it a kidney disease. The kidneys, according to Galens, become affected to such an extent that they resemble a sieve. An increased flow of water can therefore be easily understood.

The period of the middle ages may be ignored; here, as in almost all other domains, it shows stagnation going back to superstitions. Miraculous cures took the place of the natural Hippocratic medicine, which was only revived in modern times.

We may quickly pass over the first few hundred years of modern times, Theophrastus Paracelsus Sylvius and Giordano Bruno may here be mentioned, to neither, however, can be credited any noteworthy progress. It was left to Thomas Willis to re-discover the presence of sugar in the urine by its remarkably sweet taste in diabetes. It was therefore reserved for the 17th century, after more than two thousand years, to again get into the right track, and bring before the eyes of an astonished world a diabetes mellitus (Thomas Willis, 1674), Dobson, Poot and Cowley, Home, as also Rollo, were worthy successors of Willis. Rollo inaugurated the use of opium and animal diet, and made some noteworthy chemical experiments that are of value even to this day.

A new era in the investigation of diabetes began with the 19th century. The distinguished London specialist in diabetes, Prout, also Bouchardat, Mialhe and Piorry already gave intimation of the same. Chemistry here already made some triumphant discoveries. Mialhe was the first to recommend alkalies. Piorry endeavored by the ingestion or sugar to replace the loss of the same through the kidneys.

Outvieing in brilliancy all these, his predecessors, is Claude Bernard. His Leçons de la Physiologie Experimentale, as also the Lecons sur la Diabete et la Glycogenese Animale are immortal and mark an epoch. His "Puncture," the experiments with curare, lastly, the investigations of glycogen and the formation of sugar in the liver, were the first steps as to the determination of any cause for diabetes. It may be asserted that giant strides have been made as a result of his labors, not only in our knowledge of diabetes, but in experimental pathology as well. His brilliant pupil and opponent, Pavy, could not deny the main points of the "Puncture," he could only assert that the formation of sugar in the liver, as observed by Claude Bernard, was post mortem. The rest, Schiff, Voit and Pettenkofer, Cantani, Epstein, Frerichs and Seegen already belong to the present time. We observe in this, as in other domains of medical research that ancient views, which are correct in the main, reappear, and after centuries gain for themselves full recognition. Then suddenly discovery follows discovery, until again stagnation sets in. Susruta, as stated, knew of the saccharine character of the urine; after two thousand years of oblivion it was again discovered by Willis. Now the track was clear, and for the 19th century was reserved the colossal wrench of the "Puncture," and whatever has since followed this experiment.

New fields of experimentation, not known to ancient times, have been opened by modern chemistry. This is, compared to the utter want of such knowledge in olden times, an immense advantage. It is to chemistry that we owe knowledge of the most important changes in tissue-metabolism caused by Glycohæmia. The foundation of the future researches in diabetes lie in the studies of biochemistry.

CLINICO-PHYSIOLOGICAL DIVISION.

Traces of dextrose, glycose and glucose or diabetic sugar have been found normally in the blood, chyle, muscles, liver and urine.

It has also been found in the intestinal tract owing to the action of diastatic ferments on the carbo-hydrates during digestion.

Glycogen is found chiefly in the liver, hence it is called liver-starch. It is also found in muscles, embryonal tissues in normal and pathological epithelium. In minute traces it is also found in the testicle, lungs, skin, pus, inflammatory niduses in the spleen, kidneys, etc. Concerning the chemical properties, composition and physiological significance for the organism, so much has already been written that we will only briefly mention that which may be considered as well established.

The most important points concerning the relation existing between glycogen and sugar may be found in every text-book on Physiology. Much, however, is still subject to controversy. There is not even unanimity as to the place where sugar is mainly produced; also little is known about the combustion of sugar. Let us see what Frerichs has to say on the subject. He says it is very evident that our knowledge of diabetes can go no farther than our understanding of the origin and destruction of sugar in the human economy:

"The first source from which the blood derives its sugar, is the digestion, which furnishes the sugar in large quantity and in a proper form for absorption, by causing the starch, etc., of vegetable food to undergo the saccharine fermentation."

Concerning what follows there is much less known, it has not yet been determined if in diabetes there is increased production or decreased destruction. The statements concerning the percentage of sugar in the several parts of the circulatory system, the derivation of sugar from the albuminoid, and its relation to glycogen have not yet by any means been proven. The importance of these transactions in tissue metamorphosis is so great, and it reaches so far in all developmental processes, that it would be well to have a care not to come to a hasty conclusion one way or the other.

It is, however, apparent that the change and destruction of glycogen is under the influence of the nervous system. It is also certain that regulatory processes go forward in the cells of the liver and muscles, the nature of which is little understood.

As little is known concerning the primal cause and the real nature of diabetes. In more recent time the conviction is gaining ground that the self-same pictures may symbolize other casual momenta.

Without mentioning diabetes insipidus and diabetes inositus, cases of diabetes phosphaticus, diabetes oxalicus have been observed (Führbringer). On the other hand, it cannot be gainsaid that the sugar stands in a certain relation to the symptoms presented by the disease. This impression is corroborated by the cases of diabetes intermittens. Of course cases have been observed in which the intermissions were characterized by inosuria, phosphaturia and oxaluria, and the symptoms therefore remain very nearly unchanged.

It is a very simple matter to determine the presence of dextrose in the urine—we have methods as simple as they are sure.

1. Determination by means of polarization. Dextrose is dextrogyrate, hence its name; this process is, however, useless for the practising physician, on account of the fact that every physician does not possess the necessary apparatus; furthermore, that small quantities cannot be positively demonstrated by it.

2. Moore's test. Caustic potash or soda hydroxide is added to to the urine in the proportion of one of the former to three of the urine and heated. If sugar is present the urine becomes yellow, brown, changing into black. By the addition of nitric acid this color is again removed. This method is simple but somewhat uncertain, and hence cannot be relied upon.

3. Trommer's test. This is by far the most positive test and also one of the oldest, if not the oldest. It is based upon the property

which sugar possesses of reducing copper oxide in alkaline solution. It is performed as follows:

After the addition of one-third solution of potash, the same as in Moore's test, a very dilute solution of sulphate of copper is added and well agitated. A small quantity of the hydrated oxide of copper is formed, showing itself in a cloudiness of the liquid; this is, however, speedily re-dissolved on shaking, giving to the fluid a beautiful deep blue color. This is especially the case in urine containing sugar. After a while a small quantity remains undissolved. The best tube is then heated, preferable above, as the changes in color can there be best observed. If sugar be present, then the yellow sub-oxide of copper will be precipitated at the place where the heat is applied. The contrast between this and the beautiful blue color of the rest of the liquid is very striking. When only a change of color and no precipitation of sub-oxide is noticed, the faintest traces of sub-oxide may be demonstrated by carefully placing a layer of dilute hydrochloric acid in the test-tube upon the cooled liquid. The upper part of the liquid is thereby somewhat supersaturated, and at the juncture of the two liquids a very delicate precipitate of a yellow or reddish color will be observed, which gradually sinks to the bottom. It is, however, necessary to observe in the use of this diagnostically important test that there are many substances that will act in a like reducing manner upon boiling, hence it is never well to boil too long. Albumen, when present, must first be removed by acetic acid. This test is of no use in decomposed ammoniacal urine.

4. Boettger's test. To the urine is first added potassa, and then a small portion of basic nitrate of bismuth—Magisterium Bismuthi. The smaller the quantity of sugar suspected the less must be used, as a small quantity of sugar will only reduce a small quantity of oxide of bismuth, the excess will hide the characteristic dark coloration. Upon boiling, the liquid becomes smoky; after standing a while it clears, and a black powder, metallic bismuth, settles at the bottom. Occasionally the powder is not black, but gray. This is the case with a small quantity of sugar, which is only able to reduce the oxide of bismuth to the sub-oxide, and not to the metallic form. In this test a counter-test is made to determine whether or not the precipitate be due to sulphate of bismuth. For this purpose a new specimen of urine is taken; potassa and finely powdered

litharge is added thereto and boiled. In the presence of sulphur a black precipitate of sulphate of lead will be formed.

Phenylhydrazin test. Jaksch describes this test as follows: Place in a test-tube two pen-knife points full of phenylhydrazin hydrochlorate and three pen-knife pointsful of acetate of sodium; the test-tube is then filled one-half full of water slightly heated, then a like quantity of urine is added. The mixture in the test-tube is placed in boiling water, and, after the lapse of a quarter of an hour, it is placed in a beaker glass filled with cold water. Should the urine contain sugar, a yellow crystalline precipitate will at once be formed, which, under the microscope, will be seen to consist of yellow needles, disposed singly or in circles. This test is of the greatest importance because it demonstrates the smallest traces of sugar and is the only test which demonstrates the sugar as such; crystals of phenylglucosazon being formed by the action of the glucose on the phenylhydrazin.

QUANTITATIVE ANALYSIS OF SUGAR.

1. Moore's test may be used to approximately determine the quantity of sugar present, by noting the different shades of color. A slight darkening in color during the boiling will demonstrate a small quantity of sugar and *vice versa.*

2. Fermentation test. Taphenier recommends the following: The specific gravity of the urine is determined by means of a urinometer in the usual way. To the urine is then added ordinary compressed yeast 150 C. C., say a piece as large as a nut. Disseminate the same by agitation, cover the vessel with filter paper to prevent evaporation, and then invert a beaker-glass over the same. The fermentation will be completed, at the ordinary temperature of a living room, in 24 to 28 hours. This may be recognized by the fact that the formerly cloudy urine has become much more transparent, development of gas and froth have ceased, and the yeast has for the most part settled to the bottom as a powdery sediment. Or, still more positively, by demonstrating the absence of sugar by chemical test in a small quantity removed by means of a pipette. The urinometer is now very carefully introduced so as not to disturb the sediment at the bottom, the specific gravity and temperature are then noted. If the temperature be higher than before the

fermentation began, then the figure 0,0003 (1-3 degree of the urinometer) is added for every degree of difference in temperature to the specific gravity of the urine after the fermentation. If lower, then the same figure is subtracted. The percentage of sugar present is obtained when the corrected specific gravity of the urine is deducted from the specific gravity of the urine before the fermentation and the differenee is multiplied by 230. (It has been demonstrated that a difference of 0.001 in the specific gravity is equal to 0.230 per cent. of sugar). This method admits of the determination of 0.1 per cent. of sugar in specimens of urine containing over 0.2 per cent. with careful sinking of the urinometer to 0.5 per cent.

In doubtful cases of mellituria the method of Külz is applicable to determine the possible escape of sugar. The patient is made to eat freely of sugar and starchy food. During the next 2—4 hours the urine is subjected to Moore's or Trommer's test. A long interval must not be allowed to elapse, as, according to the observations of Kulz, the elimination of sugar is apt to be ended in six hours.

In addition to dextrose, levulose has also been found in urine. This only differs from the grape sugar in rotating to the left in circum-polarization, otherwise giving the same reactions. It is occasionally found when chemical and polariscopic examinations differ. It is found associated or intermitting with dextrose, from as yet not well understood causes.

Other levogyrate substances are also found which are not sugar, especially oxybutyric acid, hence the presence of levulose can only be positively determined by fermentation.

Regarding the chemical determination of inosite, urea, uric acid, creatinin, etc., the text-books on chemistry and physiology give all the necessary details. For the practising physician their determination is of little import. The amount of urea he can very easily determine by taking account of the solid constituents and comparing them with the amount of sugar present, beside which urea forms the chief amount. Of importance still is the detection of Acetone• The method most frequently made use of is the one with ferric chloride is added to the urine drop by drop. A flocculent cloudiness is caused by phosphates, at the same time, however, a dark cherry red or Burgundy-like color is produced.

Legal has suggested another positive procedure. Since the ferric chloride reactions are produced by other bodies, as salycilic acid (here the fact of the patient having been treated with salycilic acid will decide), also formic acid, as shown by Nobel.

Legal's test consists of a few drops of a moderately strong fresh solution of nitroprusside of sodium in caustic soda hydroxide, added to the urine. The liquid becomes red and yellow after a time. Then 2—3 drops of concentrated acetic acid is added. The point of contact becomes purple. If no reaction is present the solution remains yellow.—*The Dietetic Gazette.*

ERRORS IN DIAGNOSIS AND THEIR CAUSES, WITH CASES.

By G. M. B. MAUGHS, M.D., LL.D. (Read before the St. Louis Medical Society, March 29, 1890.)

The case so interestingly reported by Dr. Broome at the last meeting of this Society was not more ably treated and reported than it was instructive in pointing out the necessity of availing ourselves of all means necessary to determine what is the matter with our patients. if we would cure them, and the great wrong done our profession, ourselves and our patients by neglecting these.

Here was an active young man, accustomed to much horseback exercise, as a stockman, who, after a serious injury from a fall, his horse falling on him, complained of symptoms referable to his bladder, and only to his bladder—treated for months by as many as three different physicians, all eminent in their profession, yet he was ignorantly, blindly treated, consequently never cured, none of the three physicians using the means absolutely necessary for an intelligent diagnosis or scientific treatment; indeed, without any one of them knowing any more about the cause of his sufferings than he knew or told them. He knew there was something wrong with his bladder, and what that something was we are told not one of the three made a rational or scientific effort to find out, and per consequence, did not find out or remove either by accident or design.

It is no excuse to say there was difficulty in passing a sound, even when the patient was under chloroform to the surgical degree. Dr. Broome found this difficulty and passed the largest sound readily by availing himself of the local anæsthetic properties of cocaine. Now the local anæsthetic properties of cocaine were just as well known to each of these physicians and surgeons as to Dr. Broome. It is a fact well known to the entire profession and to many of the laity. By this means he readily discovered, and subsequently successfully removed, a flattened stone as large as a hen's egg, with the infinite relief and entire cure of his patient. Even without passing the sound, this stone could have been detected by bi-manual palpation, the finger or fingers or the whole hand as far as the thumb of one hand, passed into the rectum, and with the fingers of the other hand above the pubes, the stone must have been detected. Tell me I could not in this way feel a brick-bat in a man's bladder! Admitting the difficulty sometimes met with in finding a small sacculated stone in the bladder, this was no small stone and only the bladder itself did or would sacculate it—sacculated indeed!

But even admitting that all these means had been tried and failed, then a lithotomy incision through the perineum, a finger passed into the bladder through the incision, must have found it, as the bladder is not a large enough cavity to hide a mill-stone beyond the possibility of an intelligent, educated finger in the bladder finding it. And then, without the presence of a stone, a lithotomy operation would have been good practice for the cure of a cystitis that had produced partial necrosis of the mucous membrane.

This case has its parallel in one happening twenty years ago here in St. Louis. The patient, a young man, after months of suffering from disease referable to the bladder, died with disorganization of his kidneys and uræmic poisoning. A post-mortem showed a bladder as large as a goose egg, its wall indurated, thickened to one-quarter of an inch in thickness, and the cavity packed full of small calculi—gravel. With him there was no retention of urine—there was no receptacle for its retention except in the ureters and kidney. That patient was attended by two physicians who, although the entire suffering was referable to this bladder—only to this bladder—never passed a sound or catheter. Why pass a catheter or sound? There was no retention of urine; this passed off as fast as it could soak through the gravel.

Sincerely hoping for the credit of the profession and benefit of humanity that there are no more such doctors, yet, lest there be a few more left, I feel constrained to recommend a preparation kept by my preceptor, a gentleman of the old school—a country doctor of great experience and truly great worth. His office was what was then known as a "doctor's shop" in which he prepared all his pills, tinctures and mixtures. The washings of the mortars, slabs, spatulas and bottles were poured into a large stone jar under the table. This jar was labeled in large letters *Omnium Gatherum*, and contained in solution tartar emetic, aloes, calomel, blue mass, Spanish flies, quinine, opium, iodine, arsenic, etc. Observing one day that it was nearly full, I suggested that it be emptied into the street. With a look of incredulity he remarked: "Pour out that jar!" "Yes," I replied, "why not?" "Why not? Young man, do you know that it is the most valuable preparation in the shop?" "Valuable for what?" I asked. "Invaluable," he replied. "When I do not know what is the matter with a patient I just give him a bottle of omnium gatherum. And don't you see it has a medicine for every condition, and whatever medicine suits the case goes for the disease." "Well," I remarked, "admitting all that, you would have little use for it as you always knew what was the matter." "Now, young man," he remarked, "you have much to learn, in fact I have more use for omnium gatherum than for any other medicine in the shop." From which I was given to understand that most of his patients had, he did not what.

CASES.

Some fifteen years since a young woman was sent to me from the interior of the State suffering from paralysis. She was twenty years of age, and had been bed-ridden since she was seventeen years old; was unable to walk or even to sit up for but a short time.

History.—At near her menstrual period she had greatly fatigued herself by dancing until late at night. Next day was unable to leave her bed; menstruation was scanty; there was dysmenorrhœa never before felt; spinal tenderness, and, after a few days attempting to walk, she found pain and suffering in the attempt, which increased until she was soon unable to walk or even stand up.

Diagnosis.—Spinal trouble, for which during the next three years she had blisters, setons and moxas applied from the nape of her neck to the os coccygis. As her helpless invalidism was associated with dysmenorrhœa, she was referred to me. Upon examination I found the uterus sharply retroflexed, enlarged, tender. The uterus was gently replaced and supported with small glycerole cotton tampons, and I made application of iodine and warm water, and ordered vaginal injections. As soon as admissible a small neatly-fitting Hodge's lever pessary was placed in position. Without other than uterine treatment and without even recognizing that she had a spine, in a few weeks she was enabled to walk to the parlor and play for sometime upon the piano, of which she was very fond, being highly cultivated.

Before doing so, however, she was compelled to send for a dress-maker and have clothes made, for although wealthy and belonging to society, she had no clothes, had no use for other than bed-room gowns for three years. She soon returned home quite well.

Now the error in diagnosis here had not been from any inability or carelessness on the part of her physicians, who were able and experienced men, but because dominated by the more striking and distressing symptoms, spinal tenderness and paralysis, which were entirely reflex; they had, though she was a woman, and uterine symptoms were well marked, entirely overlooked the fact that a uterus belonged to such. But this was in the days of long ago, when the uterine mania had not disturbed the Arcadian loveliness of rural districts. Now all is changed, and doctors often forget that there is most generally a woman attached to the uterus.

Not long after the return home of this patient the parents of another young woman from the same town came to the city to consult me about their daughter, a lovely young woman, æt 18 years, who some months before had had a nearly fatal attack of typhoid fever, since which time she had an almost constant discharge of pus from the bowels, the result of intestinal ulceration. She was wasted with hectic fever, which must soon destroy her unless relieved. They were anxious to bring her to the city if I thought it necessary or thought it would relieve her.

History.—By careful inquiry I elicited the following history, without its significance appearing to them : In early June, while preparing for her graduating exercises, she sat on the damp grass in the shade, at the time her menses were expected, writing her composition. She got up feeling chilled; attended a party that night, came home with a blinding headache, and had a hard chill, followed by high fever with pelvic pain. Her menses did not appear. Her case was pronounced typhoid fever, which came very near proving fatal, and from which she had never entirely recovered, having purulent discharge, hectic fever, etc.

After hearing this history I told them, unhesitatingly, that their daughter had not had typhoid fever, and that the pus was not from intestinal ulceration; that she had inflammation of the ovary with abscess which had broken into the bowel.

Upon seeing the patient, who was brought to the city, I found this diagnosis correct. Fortunately the abscess had broken into the rectum at a point within reach. With the long tube of a uterine syringe I was enabled to wash out the pus sac with antiseptics and astringents. The patient was quite cured and has been long married, but has never had children. Yet she might do so as only the left ovary was affected, the right remaining normal and her menses have been normal.

Now in this case the physicians were dominated by the more prominent symptoms, high fever, delirium, abdominal tenderness, together with the fact that there were several cases of typhoid fever in the school.

Their error in diagnosis was the result of not availing themselves of the means necessary to locate the lesion—differentiation, exclusion—not from ignorance, for they were intelligent, experienced, conscientious physicians; but, seizing upon the prominent symptoms they were satisfied to accept the disease that might account for them.

Ten years ago, at the time of the meeting of our State Medical Association, I received an urgent request from the leading physician of the place to attend, as he wished me to see his wife, who was very ill with some kind of kidney trouble. On arriving at the depot I found him waiting for me with his carriage and anxious for me to go at once to see his wife, who was now alarmingly ill. We went first to the Convention, where he waited for me until the Convention adjourned at noon, when, with four or five other physicians and surgeons, among them Drs. Prewitt and Lankford, who had been invited to dinner and to meet in consultation the physicians in attendance upon the case.

History.—The patient, a finely developed, handsome woman, in the prime of life, had been complaining for some time, when she had suddenly a violent hæmaturia. The bladder was found to be healthy and the blood came from the kidney. The kidney on the right side was found to be enlarged, with manifest enlargement of the right side of the abdomen. The patient's condition was deemed critical, and as kidney diseases belonged of right to the surgeon, a distinguished city surgeon was sent for, who, after a careful examination, agreed with the physicians in attendance, that it was disease of the kidneys and of a serious nature, as the right kidney was much enlarged, with abdominal tenderness. The patient was placed upon appropriate treatment and the surgeon returned to the city. After some weeks with recurring attacks of hæmaturia, with increase of other symptoms, enlargement of the kidney, increased tenderness, etc., the surgeon was again sent for, who, satisfied with his former diagnosis, gave a more serious prognosis and additional directions suitable to the new phases of the disease. So entirely convinced were all of the renal character of the disease, that the husband, a most intelligent and experienced physician, in giving me the history, symptoms and treatment, never referred to any other organ.

When the abdomen was exposed it was found manifestly enlarged, notably on the right side. The patient had hectic fever, skin hot, pulse frequent, abdomen tender. There were occasional chills. After running my hand over the tumor, palpating, pressing down the fingers, running them around the enlarged margins, I remarked to half a dozen physicians standing around that "Any fool might tell what was the matter with this patient." All looked as though they heard a clap of thunder from a clear sky, and the husband, whose love and devotion for his afflicted wife made him more than an interested spectator, with an intensity born of fear and hope, remarked that that was just what they wished to learn. I said it was an hepatic abscess. "Hepatic abscess," exclaimed several, and the husband asked me if it were an hepatic abscess, how did I account for the want of hepatic symptoms, the bowels being regular, fæces colored, no jaundice. I told him that I did not have to account for what she did not have, only what she did have—hepatic abscess, which was quite enough, and she was at liberty not to have any kidney trouble, and she had none. Only her liver was at fault; I was glad it was alone in the mess as it did best by itself. All now examined the patient, and all standing in the presence of renal symptoms, with absence of hepatic symptoms, none confirmed my diagnosis, except Dr. Lankford, who kindly said he thought it was an hepatic abscess, not because he found anything indicating it, but because I said it was.

Now there never was a clearer or more easily made out diagnosis, one in which the doctor could be more certain. I had first distinctly outlined the great right lobe of the liver; had margined it, and felt that under it and below it there was no abnormal enlargement, and then down deep in its substance near the gall-bladder, but distinctly separated from it, I felt an indistinct fluctuation—an abscess.

I asked for an aspirator, not for diagnosis, but to drain off the pus, stating that my friends, Drs. Prewitt and Lankford, would use it, as they were as much familiar with the technique of the operation than I was. While we were at dinner the house was hunted over and a broken aspirator found; it was out of working order, but the needle was introduced deep down at the point where I held my finger. A teaspoonful of pus oozed through the needle. A new instrument was sent for, and while awaiting its arrival a warm flax-seed poultice was kept applied to the side. On its reception the surgeon in attendance drew off 15 or 20 ounces of pus. After many months' suffering and after the passage of several gall-stones—for the passage of which the opening was enlarged—the patient entirely recovered and is living and quite well at this time.

Now the entire mistake in diagnosis in this case was the existence of bloody urine—the hæmaturia, which pointed to the kidney; the enlargement existing there had entirely absorbed the attention of the eminent physicians and surgeons, so that nothing else was looked for. Why look for other conditions when a diseased, enlarged, perhaps cancerous kidney was supposed to be present, and certainly of itself sufficient cause to account for the trouble? And yet each of these gentlemen could, and most probably would, have determined the true condition had it not been for the hæmaturia—had not the bloody urine stood as a shadowy specter beckoning them to the kidneys. The means necessary for a correct diagnosis had not been used, and yet it would not be difficult to divine how a congested, enlarged portal circulation might produce hæmaturia, or why, with only a small part of the liver diseased, the gall-bladder loaded with gall-stones (but its out-flow of bile unobstructed), there should be no liver symptoms, such as pale or white alvine discharges, found in it. It is, however, very rare that all such symptoms are entirely absent. In medicine, as in other conditions of life, the unexpected may happen.

Some fifteen years since an old bachelor doctor in a distant city married a rich widow, who was approaching that interesting period of life when, if offspring are to be expected, they must be expected soon. Under these circumstances, when the desire is great, these women not unfrequently are tantalized by spurious pregnancy simulating many of the symptoms of pregnancy. Instance the old hysterical maiden, Queen Mary, of England, who married Philip, of Spain. The hope of their aggrandizement, as well as of their religion, depended upon whether Mary left an heir to the throne of England or left this to her Protestant sister, good Queen Bess. Her hopes soon produced a phantom pregnancy that tantalized the two nations and hurried the unhappy, mortified, disappointed, diseased Queen to her grave. Our couple, less royal, were perhaps equally anxious for issue and were soon gratified by the almost certain prospect of realizing their hopes. Many of the signs of pregnancy were present—absence of the menses, enlargement of the abdomen, fullness of the breasts, morning sickness, but what the doctor most relied upon was kiestine in the urine. It was daily tested to confirm its presence. The happy period approaching, fœtal movements were strong and daily increasing in strength and turbulence. Rooms were taken, a large quantity of costly baby clothes were prepared, enough for a whole family of babies. A nurse was engaged, and finally, in the fulness of time, labor was ushered in, with too much joy to mind the twisting, griping, turbulent pain, which increased in violence until both husband and wife were in the throes of a strong labor, all of which was borne with heroic fortitude by both parties in view of the great end. Even the cries were suppressed, only an amount sufficient to secure the well-being of the child and to warn all concerned of what was going on. Finally the doctor was sent for, a most distinguished accoucheur and physician. The doctor, on examination, thought there might be some mistake in the time; being assured that this was all right, he called again before going to bed; thinking he might not be wanted before morning, but as a matter of precaution slept with his boots on. The labor proved rather tedious. This, however, could be accounted for by the advanced age of both parties. After dancing attendance for a day or two, the accoucheur, becoming a little tired and much disgusted, had them send for me. On making them a bi-manual examination I told her plainly that she had to conceive before her labor could be successfully completed, and in fact she was not pregnant. This was a severe blow, but to terminate the farce I picked up a uterine sound and passed it to the fundus, two and a half inches. Alas! what fools we mortals be!

Here were two sensible, clever people making fools of themselves because dominated by their hopes. They accepted proof that would not have deceived anyone else. Trifles light as air are to those who wish or fear confirmations strong as proofs of holy writ.

Just before leaving for Europe Dr. Bryant, I believe of Belleville, Ill., brought me a patient, an elderly German lady, who had been told she had an ovarian tumor. The doctor, who was a gentleman of much ability and large experience, a general practitioner, but not priding himself on his tact in abdominal tumors, and not wishing to attack an ovarian tumor, brought the patient to me. Upon inspection the abdomen was seen to be much enlarged. The patient had been told that this was an ovarian tumor and would require an operation. She was most naturally not comforted by such possibility, and with such in view, to visit a city doctor who might unscrew her ears and take off her head, merely to see what was in it, was not calculated to allay her fears. Many years previously a lump had been felt in her abdomen or stomach, as she stated, which had gradually enlarged to its present size. This, while not favoring cystic tumor of the ovary, did not exclude a dermoid cyst or uterine fibroid. Bi-manual touch showed the pelvic organs normal in size and position, with no pelvic tumor. Abdominal palpation and percussion showed the tumor to be from above downward, excluding pelvic origin. The lower margin of the tumor, which reached the crest of the ilium, was well defined, the fingers readily lifting it up. The liver was also enlarged. Without knowing anything of her history, I remarked that she had been living for ten or twenty years in a swamp. "Yes," she said, with surpaise, that a stranger should tell her where she had lived—she had been living in the Mississippi bottom above Cairo. "Yes," I told her, "and you have had old-fashioned shaking agues nearly all the time." She admitted that she had had the ague most of the time until they sold out and moved to the hilly country near Belleville. "Now," I remarked to the doctor, "this is an enlarged spleen—an ague cake," and in a few minutes he was as well satisfied of the fact as I was, and with true nobility of character remarked that he was ashamed of himself, and that I must think him stupid. By no means, I assured him with all honesty and candor, that he had nothing to be ashamed of; that from his standpoint nothing was more natural than his conclusion. We agreed upon her treatment with quinine, iron and strychnine, ergot, muriate of ammonia, with external application of iodine, and assured the happy woman that the doctor would certainly cure her without an operation, which, I have no doubt, with the change of locality, he did. She was greatly rejoiced at the prospect of again getting home undissected.

Now here was an error in diagnosis by an honest, able and experienced physician, made by implicitly accepting the views of others which were plausible, without taking the means necessary to make the correct diagnosis, and these means, too, were quite as available to him as to me, and he was quite as competent to use them.

Then look for yourself; take nothing for granted; test all things and hold fast to that which is true.

About 1878 or 1879 Dr. Lankford asked me to see a patient on whom he was going to perform ovariotomy. He did not want my opinion as to the propriety of the operation, but to assist him in determining some minor points, such as which ovary was diseased, whether there were adhesions, the condition of the pedicle, etc.

History.—The patient, æt 45 years, the mother of seven or eight children, the youngest of whom was æt 12 or 15 years. The menses had been quite irregular for some time; finally, some twelve months before, they had ceased entirely. She believed that she had passed the critical period—the menopause—was told that such was the case by her family physician, and indeed she had most likely, so far as the epiphenomenon of menstruation—the bloody discharge—was concerned, but the true act of menstruation, ovulation, was only in abeyance, existing *in posse* and liable to exist *in esse* on suitable stimulation or at uncertain intervals.

Some months after the interruption of menstruation, the abdomen commenced to enlarge, which continuing, she consulted her family physician, who told her it was a deposit of fat in the abdominal walls. This is a not infrequent condition following the menopause, it is true, but the enlargement continuing to increase, after several months, she again consulted her physician, who now discovered an ovarian tumor, and had a surgeon see her with him. The conclusion was that its rapid growth and size required its removal without further delay. The family had lately become quite affluent and had surrounded themselves with all the comforts of life. I found her sitting in a large arm-chair. Independently of the tumor she was a large and fleshy woman, and with this was quite helpless. With some difficulty we assisted her to bed, where a very casual examination showed her to be in the last months of pregnancy. Upon applying the ear to the abdomen the tic tac of the fœtal heart was quite infallible, and had doubtless been so for months. She was not more surprised than delighted when I assured her that nature would remove her tumor within a few days without an operation, that she was pregnant with a living child and within a few days of her confinement. She assured me that she had never felt the least movement of the child, and had not thought pregnancy possible. She was delivered, a few days after this, of a 12-pound child, alive and strong.

Now here was a most inexcusable error in diagnosis, that might have terminated fatally to the woman and disgraced the surgeon and the profession, made through a belief in the impossibility of pregnancy both on the part of the patient and physician, and therefore the inexcusable neglect of all the means readily available to insure a correct and certain diagnosis. A like carelessness has in other cases resulted less happily to all concerned. May such mistakes never again darken the history of ovariotomy!

These cases, which are literally true and susceptible of proof in every instance, might readily be greatly extended from my very limited experience, but one other and we are done; and as this was the most strange and ridiculous of any, and as it happened with no less a personage than one of our faculty, a professor at the time, in the Missouri Medical College, you will bear with me in its relation.

Some ten years ago, one of our faculty, formerly well known to many of you, had an attack of obstinate constipation, with abdominal pains, vomiting, etc.; he had taken a dose of cathartic pills, which, failing to operate, had only increased the trouble, deterring him from a further trial of purgatives. Being a single man, he had taken a room at St. John's Hospital, and being a member of a college faculty of ten professors, with two surgeons and a large corps of able assistants, all anxious for experience, he had no difficulty in obtaining ample advice. It was soon determined that he had intestinal obstruction caused by invagination; whether from above downward, or from below upward, the knife would certainly determine, or that the obstruction was from a stricture from false bands, or perhaps from a rugged, twisted knot in the gut. This last suggestion quite fixed the matter with the professor, who, from being at first somewhat averse to being killed, gladly accepted anything that promised to remove the rugged knot in the gut, which could only be done by an operation. The only thing that seemed positively determined was that the intestinal lumen was in trouble, and could be relieved by a process with the euphonous name of laparotomy. See with how rapt a cadence it falls upon the ear—intestinal lumen—laparotomy. The very whispering of the words left an impression soft as the dews of Mount Carmel, and harmonious as the music of the spheres, and gave a rougher sound to the thing to be disposed of—rugged knot in gut! The professor was completely won over, and became quite anxious for the experiment. The room was being disinfected, and the next day was set apart as sacred to lumen, whose cause had been so ably championed by the surgeons and assistants. At this stage I was asked to see the brother whose lumen had been rudely invaded by the rugged, twisted knot. Upon inquiry I learned the facts and suggested purgatives. I had been taught that through all the ages, from Hippocrates to Watson, purgatives had been thought indicated in constipation. The surgeons were shocked at the suggestion and declared that the lumen could only be restored by laparotomy, while the professor raspingly, whisperingly gasped, "rugged knot!" and went into convulsions which could only be relieved by one of the assistants whispering in his ear: "lumen, laparotomy!"

With much difficulty I obtained consent to try castor oil in repeated small doses, with injections of warm water and sweet oil. The oil was rendered quite palatable with lemon juice and sugar, and a relay of assistants was placed in charge to give the oil in teaspoonful doses and administer an enema every two or three hours, using gentle massage over the abdomen.

I was given to understand that purgatives in constipation had been given up by advanced thinkers, and the professor gazed on me with a look of pity, as much as to say that while he forgave me, he hoped I might yet learn that in opening up and clearing out the intestinal lumen, laparotomy was the first thing to be thought of; if advisable, castor oil might be used afterwards.

The oil was given and injections were administered again and again, until most of the bottle of oil had been swallowed, when the lumen began audibly to announce the coming light, becoming, towards morning, the most luminous lumen in the hospital; overflowing the chamber and spoiling the carpet, while more than one assistant lay around loose, having been overcome by the odoriferous manifestations—the illumination that lumen had given; indeed, lumen was about all that was left of the professor. The surgeons never fully forgave me for preventing, by an antiquated treatment, a beautiful operation, a scientific death and a first-class funeral.

Now the error in diagnosis here was made in giving too much importance to the symptoms of intestinal obstruction and neglecting the means necessary to test the nature of the obstruction which here was proven by the oil and injection to be fæcal impaction with a sluggish condition of the bowels. The well-known dangers and mischief that have been done by the administration of drastic purgatives such as croton oil, in cases of intestinal obstruction from invagination, where medication is powerless, have by neglecting laxatives in doubtful cases, swung the pendulum too far. A too ready resort to the knife when more conservative measures would suffice, is the tendency of the age. The glamour of a successful laparotomy is something to which the unpretentious triumphs of a bottle of oil can have no parallel, consequently we have exchanged the castor oil bottle for the knife. Strange what fashions medicine hath! Just in proportion as the knife has gained ground the lancet has lost. The only abuse of the lancet now is in its neglect, whereby many patients are allowed to die who might be cured by a timely and free resort to blood-letting, while many diseases are allowed to become chronic, entailing an indefinite time of suffering and invalidism, that might be aborted by a bold and timely bleeding.

ARGUMENT.

That "doctors differ" is no longer true. That they often err is a lamentable fact, but in almost every instance this error is chiefly the result of failure to avail themselves of the means at their disposal to render the diagnosis positively certain.

By the substitution of physical signs for rational symptoms, modern science has rendered it no longer possible for doctors to disagree as to what is the matter with the patient. Would that we were as ready in the cure as in the diagnosis! Unfortunately, however, while in order to cure or to treat a patient rationally, a correct diagnosis is of paramount importance, it does not follow that because we know positively what the pathological conditions are, that we can cure the patient. The pathological conditions are positive, tangible facts cognizant to our senses. The treatment is not necessarily so. Were our therapeutic knowledge equal to our pathological, death would be a rare accident.

I would not have anyone infer from our claims that it is thought or claimed that we can always tell with certainty exactly what is the matter in any and every instance. The human organism is too complicated a machine, and human judgment too fallible for such a state of perfection. There will perhaps always remain some obscure diseases, that will elude the most intelligent inquiry, but these are daily becoming more rare. I only claim for diagnosis the same amount of perfectability known to the other higher departments of human knowledge, and nothing short of this should satisfy the modern physician. We may still say with Hyppocrates "art is long, time is short, experience imperfect and judgment difficult."

MORAL.

Always look at both sides of the shield before forming an opinion.—*Weekly Medical Review.*

A Fortune from Antipyrin.—Dr. Knorr, the discoverer of antipyrin, has found a mine of wealth in the late epidemic of influenza, having taken in, by means of his royalties, considerably more than $100,000,000. He gets 60 cents on every ounce produced, and the drug sells at $1.40 per ounce. This, if true, would indicate a consumption of not less than 40 tons of the article by the victims of *la grippe.—Jour. Amer. Med. Association.*

[We know many good doctors who did not use a single grain of antipyrin during the influenza epidemic, for the very reason that it was a merciless monopoly.—Eds.]

EDITORIAL.

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MEDICAL RECORDS OF THE CONFEDERACY.

We publish a prospectus and appeal from Prof. Jos. Jones, M. D., of New Orleans, for the organization of methods for the recovery of such material as may yet remain unpublished, to complete the medical history of the late Confederate States.

Early in the war North Carolina organized a medical department under the direction of Dr. Charles E. Johnson as Surgeon General. Commissions were issued for the rank of Surgeon and Assistant Surgeon, commensurate with the urgency of the times. At first these appointments were made by the Surgeon General upon his knowledge of the capacity of the appointee, but later a Board of Examiners was establised, with headquarters at Goldsborough, where all holding commissions were required to report for examination. Later on, the medical department of the Confederacy was established, assuming all the management of the details of organization, whereupon Dr. Johnson resigned, believing his office to be an unnecessary expense. Subsequently Dr. Edward Warren was made Surgeon General—both of these gentlemen had been editors of the "Medical Journal of North Carolina."

The part worthy of record which this State bore in the four years of war, was the machinery set on foot for the supply of medicines and appliances for the sick and wounded. Her hospital in Richmond, Petersburg, Wilson and other points, were well maintained, and the record of these matters, beyond the dry detail of statistics, it may not be too late to rescue from oblivion now. Many surgeons are still living who may have records or private or personal notes of their several hospitals or other charges, and a large mass of information still fresh in the memory of the medical officers who bore the heat and burden of the day, may be made available for our future history.

Every item of management and economical detail of a hospital in those days will interest our successors, just as the one item handed down to us from the first North Carolina Medical Society (about 1801) interests us and throws light upon the status of medicine and the spirit of the people. The item referred to was that this Medical Society, moved by the burning patriotism of the day, offered prizes for the production of medicines in common use—castor oil, opium, etc., etc.

At the approaching meeting of the Medical Society in Oxford we trust that the ex-Confederate medical officers will consider the appropriate means to assist in this work of the historical perpetuation of their service.

INCIPIENT DISEASES DETECTED BY EXAMINATIONS FOR LIFE INSURANCE.

The real advantages which life insurance have given the South in her impoverished condition since the war, can hardly be estimated by figures. More especially has this advantage been great as regards insurance at moderate rates furnished by brotherhoods and assessment organizations in general. But there has been another feature in life insurance that has not been enough observed, and that is the useful results of the examinations of rejected applicants. Incipient phthisis, the various forms of Bright's disease, diabetes and diseases of the heart, being among the most prominent diseases which might exist without the knowledge of the applicant, and which, to be effectually managed, must be recognized in the early stages.

We are not aware that any life insurance company has kept a record of rejected applications, and even if they did, it would serve no purpose in the study of disease without the cases could be followed through a series of years, and their progress noted.

We were informed a few days ago of the case of a very successful gentleman as a solicitor of life insurance, who, after a good run of work, concluded to take out a policy himself, but upon the examination of his urine he was so much shocked to see the large amount of albumen, he did not recover his self-possession in some time. The result of this case has not been reported.

Many years ago (1868) this writer made an examination for a life insurance in the person of a merchant who had a very unfavorable physique. To test his lungs it was arranged that the examination should be made in the third story of the building. His respiration was abnormal, there was dulness in the apices of the lungs, and an adverse decision followed. The same applicant was passed at the home office of a company of good repute. His condition has been that of a man of depreciated health, but knowing his infirmity he has led a more prudent life, and, doubtless, even according to his own belief, has been all the better for having had the warning. In the meantime, he has lost one or two brothers with phthisis.

This writer has now in his mind a case of diabetes and one of acute nephritis who received their first warning of danger from an examination for life insurance, in the former case prolonging a valuable life for many years, and the latter not yet long enough under observation to learn the result.

Many are the instances that can be recalled by careful examiners of such cases as we have mentioned above, and we suggest it as a fertile subject of investigation for the future. For the physician it involves the verification of his diagnosis, to the applicant it may mark a crisis in his career, and all that prevention can suggest is made available. We have known more than one applicant to remark that it was worth more than the expense incurred, to know his condition of health.

To the beneficent advantages of life insurance can well be added occasional prophylaxis of great value.

WOOD'S CLINICAL AND SURGICAL MONOGRAPHS.—The series for 1890 contains a great deal of valuable material for present use of future reference. The January number contains, "Neuralgia," by Gowers; "Prognosis of Disenses of the Heart," by Leyden; "The Sputum," by Kaatzer; "Hypnotism," by Forel; "Nasal Obstruction," by McDonald. The February number: "Action of Uric Acid in the Causation of Disease," by A. Haigh, M.D.; "Initial Stages of Consumption, their Nature and Treatment," by Horace Dobell, M.D.; "Ectopic Pregnancy and Pelvic Hæmatocele," by Lawson Tait, M.D.. The March number: "Treatment of Cancer by Electricity," by Dr. Inglis Parsons; "The Dreadful Revival of Leprosy," by Sir Morell Mackenzie, M.D.; "Diseases of Old Age," by Dr. A. Seidel; "Urinary Neuroses of Childhood," by Dr. Guinon; "Varicose Views of the Lower Extremities," by William H. Bennett; "Uses of Electrolysis in Surgery," by W. E. Stevenson, M.D. Many of these contributions are important, and if neglected may lose to the reader who is conscientiously trying to "keep up" with the current of scientific literature some of the most essential utterances of the day. Such a paper as Dr. Haig's on the "Action of Uric Acid in the Causation of Disease," is a physiological and pathological statement which covers the most recent knowledge on this important topic. The observation that lithia, although very soluble in the form of water of lithia, does not promote, but retards, the excretion of uric acid, the reason being that, given internally, it forms a nearly insoluble triple phosphate with phosphate of soda, or with the triple phosphates of ammonia and soda, salts generally present in animal fluids. In fact, lithia, by uniting with the phosphate of soda of the biood to form an insoluble compound, it derives the blood of this well-known solvent of uric acid. Sir Morell Mackenzie's warning against the spread of leprosy should be circulated the world over, notwithstanding its tartness in reviewing the action of the Royal College of Physicians in their attempt to investigate the disease. It is time to speak out about leprosy, and agitation should be kept up until the disease is exterminated by confining all lepers in colonies. The folly of discussing the contagiousness of a disease that is increasing in every direction where there was the weakest focus!

REVIEWS AND BOOK NOTICES.

THE NATIONAL MEDICAL DICTIONARY, Including English, French, German, Italian and Latin Technical Terms Used in Medicine and the Collateral Sciences, and a Series of Tables Useful Data. By John S. Billings, A.M., M.D., LL.D., Edin. and Harvard; D. C. L. Oxon, etc., etc., etc., with Collaboration of W. O. Atwater, M.D., Frank Baker, M.D., S. M. Burnett, M.D., W. T. Councilman, M.D., James M. Flint, M.D., J. A. Kidder, M.D., Wm. Lee, M.D., R. Lorini, M.D., Washington Matthews, M.D., C. S. Minot, M.D., H. C. Yarrow, M.D. In two volumes—Vol. I. A to J, Vol. II. K to Z. Philadelphia: Lea Brothers & Co., 1890.

This work since it has been announced has been almost impatiently expected by students all over the country. The wide fame of the author, his abundant facilities for linguistic research, a learned profession to draw upon for special investigation, gave assurance that the completed volumes would afford a practical dictionary for the daily needs of the profession. In the quality of the book there is no disappointment, but rather we have a work which affords what it formerly took many volumes to give us. A student could not find in any one dictionary the multitude of new terms, especially those from the German and French, occurring in current literature, and his table had to be lumbered with foreign dictionaries in two or three languages, one for German medical terms, so making his working outfit ponderous and laborious. It has been many years since Dunglison's Dictionary appeared, and the subsequent editions have done very little towards meeting the requirements of the present wants of the profession, but as Dunglison's great work made an era in medical study, as a substitute for Quincy and Motherby, so does "The National Dictionary" mark an era in American medicine.

The typographical excellence of these volumes is a marked feature, and although the large print has swelled it into two volumes, had it been compressed into one the book would have become burdensome.

The author-in-chief asks his readers for errors and omissions, but we doubt if any eye will be quicker to catch them than his, and that subsequent editions will make up whatever it lacks now of correctness and completeness. We rather think, though, whatever of revision will be made will be in the elision of obsolete or useless words.

One now can hardly go into his library without being reminded of the author who has furnished Index Catalogue, Index Medicus, and now a ponderous dictionary, monuments, any one of which would be more enduring than any score of authors has erected for themselves in a life-time.

MANUAL OF SKIN DISEASES, with Special Reference to Diagnosis and Treatment, for the Use of Students and General Practitioners. By W. A. Hardaway, M.D., St. Louis. Theo. F. Lange, 1890. [Price $3.00.]

This small volume of 434 pages is most conveniently planned. The first part gives us a section on symptomatology, the causes of skin diseases, diagnosis, including a very convenient help to diagnosis in the local distribution of skin diseases, a section on treatment, one on classification. This classification is based upon that of Hebra modified by the classification of the American Dermatological Association. The last section gives statistical tables of the skin diseases as occurring in the West excluding the exanthemata.

The second part of the volume is devoted to the description and treatment of diseases of the skin, arranged alphabetically.

The volume concludes with an appendix of additional formulæ and a good index. The author is a dermatologist of acknowledged ability, and his experience in teaching has enabled him to present a work suited to the necessities of students and practitioners. Its arrangement for ready reference, its copious and good formulæ, its terse diagnostic descriptions, all make it a practical and serviceable manual.

PRACTICAL ELECTRICITY IN MEDICINE AND SURGERY. By G. A. Liebig, Jr., Ph.D., and George H. Rohé, M.D. Philadelphia: F. A. Davis, 1890.

Our authors have given the profession a well-considered treatise on electricity, in which the elementary principles are elaborated predominantly, but perhaps not to a greater extent than the profession needs. The volume is divided into three parts, the first part dealing with electricity and magnetism only, the second with electro-physiology and electro-diagnosis, and the third with the applications of electricity and magnetism to medical and surgical practice. Apparatus is fully described, the illustrations are, many of them, at least, the old standards, and good, and the book well printed. It seems now that we have good books enough, what we lack is apparatus which is so durable, easy to manage, easy to replenish, that the general practitioner can test the therapeutic values alleged by writers. Many of them repeat problems and principles which others deny as strenuously, so that it must be settled by the clear-headed general practitioner—that class in our profession to whose honesty and ability for practical investigation the vast majority of therapeutical means have been established or rejected. Electric mechanism is approaching the desired condition, but is too costly at this stage. In the meantime, we must survey the field diligently by the aid of such books as this.

THE MEDICAL ANNUAL AND PRACTITIONER'S INDEX: A Work of Reference for Medical Practitioners. 1890. New York: E. B. Treat & Cempany, 5 & 13 Cooper Union. [Price $2.75.]

The profession need not get tired of medical annuals, and all the other condensed records of new remedies, new appliances, new notions, for it pays the publishers, and as long as it does they will keep their presses at work.

The thirty-six contributors to this volume are mostly Englishmen. More care in the selection of material has been shown than in the volume of 1889. Much old ground is gone over, but this seems to be necessary to give the needed connection. We find much that is good, much that needs the application of sound judgment, and some that is "stale, flat and unprofitable." But the best editors can only give us the summary, and this they have done, adding a section on *La grippe*. The ready reference arrangement of this little volume is admirable. The first gives us the new remedies, the second new treatment, both given alphabetically, one by the drug, the other by the name of the disease. Friends who have used this volume speak in higher terms than we have formerly estimated it, and their opinion is rather to be taken than that of the reviewer who has not made it a working implement.

PRACTICAL SANITARY AND ECONOMIC COOKING ADAPTED TO PERSONS OF MODERATE AND SMALL MEANS. By Mrs. Mary Herman Abel. American Public Health Association, 1890.

This is a prize essay, for which Mr. Henry Lomb, of Rochester, N. Y., gave as a prize $500. An examination of the volume convinces us that the award made by the committee was just. We unite with Dr. Irving A. Watson in his wish "that this essay may be placed in the hands of every family in the country." We believe that an examination of its contents by house-keepers will sustain the assertion that it is so far without a rival for practical simplicity and economy.

PRACTICAL ELECTRICITY IN MEDICINE AND SURGERY. By G. W. Overall. Memphis Printing Company. 1890. [Price $1.00.]

This monagraph of 130 pages is a practical essay on Electricity, divided into electro-Physics, electro-Physiology, electro-Therapy, electro-Surgery, and a concluding chapter on the care of batteries. With the gnawing interest this subject is attracting, the number of books and essays multiply. This essay has the advantage of giving, in cheap form and small compass, much of the sort of information on electricity in general that would satisfy general enquiry. It does not impress us as being the complete treatise one would desire who wanted to go deeply into the subject.

THE YEAR-BOOK OF TREATMENT FOR 1890.

Messrs. Lea Brothers & Co., publish this year a continuation of this popular series. It consists of a well-digested abstract of the best authenticated therapeutical means and methods, all from the pens of British writers. There is not to be found in so small a volume more that is worth preserving, and we commend it as one of the most useful of the *resumés.*

"LA MONA," the so-called new disease in Italy, having fatal somnolence as a characteristic, as alleged, when traced to its source officially, turns out to be a disease of newspaper making, the *New York Herald* having been the officious organ.

CORRESPONDENCE.

TO THE MEDICAL OFFICERS OF THE MEDICAL CORPS OF THE CONFEDERATE STATES ARMY.

SURGEON-GENERAL'S OFFICE OF THE UNITED CONFEDERATE
VETERANS, 156 Washington Av., N. O., La., April 9, '90.

COMRADES:—The surrender of the Army of Northern Virginia on this day twenty-five years ago, practically ended the struggle for the Independence of the Southern States; and during this quarter of a century death has thinned our ranks, and our corps can now oppose but a broken line in the great struggle against human suffering, disease and death. S. B. Moore, Surgeon-General of the Confederate Army, is dead. Surgeons L. Guild, A. J. Foard, J. H. Berriern, J. L. Derby, W. A. Carrington, F. A. Ramsey, Samuel Choppin, R. J. Breckenridge, E. W. Covey, E. S. Gilliard, E. A. Flewellen, Paul F. Eve, O. F. Manson, Louis D. Ford, Habersham, James Bolton, and other medical officers of the Confederate States Army, are dead.

The Association of the United Confederate Veterans was formed in New Orleans in 1888, the objects of which are historical, social and benevolent.

Our illustrious Commanding General, John B. Gordon, Governor of Georgia, has ordered the United Confederate Veterans to assemble in Chattanooga, Tenn., on July 2d, 1890. It is earnestly hoped that every surviving member of the medical corps of the Confederate Army will meet with the United Confederate Veterans upon this important occasion and promote by his presence and his counsels the sacred interests of the Association of the United Confederate Veterans. It is of the greatest importance to the future historians and also to the honor and welfare of the medical profession in the South, that careful records should be furnished to the Surgeon-General of the United Confederate Veterans, embracing the following data:

1. Name, age, nativity, date of commission in the Confederate Army, nature and length of the service of each, and every member of the medical corps of the Confederate States Army.

2. Obituary notices and records of all deceased members of the medical corps of the Confederate Army.

3. The titles and copies of all field and hospital reports of the medical corps of the Confederate Army.

4. Titles and copies of all published and unpublished reports relating to military surgery and all diseases of armies, camps, hospitals and prisons.

The object proposed to be accomplished by the Surgeon-General of the United Confederate Veterans is the collection, classification, preservation and final publication of all the documents and facts bearing upon the history and labors of the medical corps of the Confederate States Army during the civil war of 1861–'65. Everything which relates to this critical period of our national history which shall illustrate the patriotic, self-sacrificing and scientific labors of the medical corps of the Confederate States Army, and which shall vindicate the truth of history, should be industriously collated, filed and finally published. It is believed that invaluable documents are scattered over the whole land, in the hands of the survivors of the civil war of 1861–'65, which will form material for the correct delineation of the medical history of the corps which played so important a part in the great historic drama. Death is daily thinning our ranks, whilst time is laying its heavy hand upon the heads of those whose hair is already whitening with the advance of years and the burden of care. No delay, fellow comrades, should be suffered in the collection and preservation of these precious documents. This task of collection of all documents, cases, facts relating to the medical history of the Confederate Army invites the immediate attention and coöperation of his honored comrades and beloved compatriots throughout the South.

Respectfully, your obedient servant,

JOSEPH JONES, M.D.,

Surgeon-General United Confederate Veterans.

NAREGAMIA ALTA is the name of a new drug being experimented with in Vienna as an expectorant, by Prof. Drasche.

CURRENT LITERATURE.

WHICH SHALL IT BE:

Three Years' Scientific Study before Beginning the Study of Medicine, Three Years' Scientific Study Blended with Three Years' Medical Study, or the Equivalent to a Degree of Bachelor of Arts, before Entering upon Medical Study?

[Dr. Leartus Connor, the accomplished editor of the *American Lancet*, discusses with so much good sense the whole question of preparation for medical education, that we reprint it for the perusal of the medical colleges as well as for the medical profession.—Eds.]

The *Detroit Tribune*, March 16th, contains a statement that will encourage every friend of advanced preliminary requirement of medical students everywhere, but especially in Michigan.

In effect, it says that the Faculty of Michigan University has been considering at several meetings the requirements of the medical course at the University. It would appear that all parties granted the necessity of increasing the preliminary requirement of students entering the medical department. This is a most important admission, as it ensures some real advance.

The professors of the literary department desire that a preparation of about three years of scientific study be pursued in the literary department before the student can enter upon the medical course. Then, at the end of three years' medical course, the student be given two degrees—a M.S. and an M.D.

The second plan is from the Medical Faculty, who wish the students to carry during six years the studies of both the literary and medical departments, making a six years' course. Naturally, each Faculty opposes the scheme of the other.

A third plan is being agitated that renders the degree of Bachelor of Arts necessary for entering upon the study of medicine. At this date it is impossible to estimate the preponderance of influence supporting either of these plans. Any one of these plans would be hailed with the greatest enthusiasm by all lovers of medical progress.

Any one, if logically arranged according to the plans of ordinary courses of study, would ensure the possession by every graduate of the medical department of Michigan University of a definite amount of general and technical training, which would be placed to his credit wherever he might go, and in the pursuit of whatever work he might attempt.

But the plans are sufficiently divergent to give an opportunity for differences of opinion as to the question as to which would best fit the student for his work among the higher grades of physicians. In making either of the proposed plans its own, the University would tacitly announce that it henceforth proposed that all future graduates of the medical department should have that training which would enable them to enter upon the highest grade of the complex work of physicians. To other schools it would leave the responsibility of training men for the lower positions occupied by medical men, positions calling for less general knowledge, and less complete training of every physical, mental and moral faculty. In either case it would present the spectacle to the world of a great University which refused to admit persons to its professional schools who were far too ignorant to enter its academic department. To a certain extent the medical department would be placed in the position it ought to occupy, namely, as high as the literary department› and to be reached only by passing through the literary department. Then doctors would be compelled to enter at the "strait gate," instead of climbing over the walls, as in the past.

As for ourselves, we would prefer a modification of the last plan. First, the number of elective studies in the A. B. course, all of normal histology, all of bacteriology, all of botany, and allied scientific studies. There is no reason why an elective A. B. course should not thus be arranged, to include all the strictly and purely scientific portion of the fundamental branches of medical study. A part of these studies could be pursued under the literary, and a part under the medical professors, but all of them should be the preliminary to the securing the degree of A. B., and should be in mental training equivalent to that now required to obtain the degree of A. B. It is extremely desirable that this degree be made in all instances to represent an equivalent of work to that now required in the best colleges. The evident tendency of all literary colleges is to maintain the general principle of a definite amount of training, but to render optional the special studies through which such studies shall be obtained. By the suggested plan nearly two years of work supposed to be done in medical colleges, would be done in the literary college, and count as a portion of the study needed for the securing of the degree of A. B.

With such a foundation the practical work of the medical student could be easily completed in three years, instead of the four or five now proposed, and the study of medicine proper could be made to include very much of what now goes under the head of post-graduate instruction.

By this plan it seems to us that the wishes of both literary and medical professors could be fairly granted, and no violence offered to any of the courses of study in the University. On the contrary, the course of training would be a logical and progressive one from the moment of entering the literary department to the receiving of the final degree. Further, the course terminating in the degree of A. B. would admirably suit the needs of the numerous persons who study medicine as a preliminary to the entrance upon a life of scientific work in other widely diverse fields. In fact, it would, or might, make a course of superior value to any person for any calling, so that the minister, or lawyer, or teacher, or person of general culture, who should take such a course as we have indicated as being included under the degree of A. B., would find his training admirably adapted for his purpose. To know human anatomy, human physiology, and gain a knowledge of chemistry, should be a part of the training of every educated person, no matter what his calling. We are sure that the standing of the literary department of Michigan University would not suffer if it organized an elective course covering such a course. On the contrary, it would have placed itself in the van of all similar institutions, and especially would it meet the approval of the multitude who desire to enter upon lives of study of natural science in connection with, or without, the work of a practical physician.

We shall hope that in the discussion of this matter by the Faculties and the Board of Regents of this University, this phase will not be ignored.

We do not know of another institution in which these changes could be so readily done, with its present machinery, or in which its interests would be so much advanced, as Michigan University.—*American Lancet.*

SOME URINALYSIS "DONT'S."

Don't call the urine a "secretion," it is an "excretion."

Don't fail to make frequent urinalyses in long-continued cases of sickness. The condition of the patient varies at different times and so does the urine.

Don't imagine that the sp. gr. is a fixed quantity. It is relative, varying with the rapidity of kidney elimination and the quantity of the urine excreted.

Don't estimate the significance of the sp. gr. unless the quantity excreted for twenty-four hours be known.

The sp. gr. indicates the amount of solid matter being excreted by the kidneys, and to a certain extent the character of the ingredients. The kidneys do not excrete at a uniform speed during the twenty-four hours, and therefore the urine is more concentrated at one time than at another. If the sp. gr. be taken only when the kidneys are particularly active, the estimate of the solid ingredients eliminated will be too great, if taken only when the elimination is proceeding slowly, the estimate will be too small. The best way, therefore, to arrive at a proper estimate is to save all the urine passed in twenty-four hours and take the sp. gr. of the collected amount. But this is not all. The normal sp. gr. of urine is near 1020, provided 1500 cc. be eliminated, the normal quantity of urine. But now suppose 3000 cc. have been eliminated, but the urinometer still reads 1020. Are not the conditions changed? Has it not taken a large quantity of solid constituents dissolved in the 3000 cc. to raise its sp. gr. to 1020? Is it not clear, therefore, that we must know the quantity of urine in order to properly estimate the quantity of solid matter excreted.

Don't examine a "sample" of urine, but whenever practicable get the whole twenty-four hours' urine and examine a specimen from this.

Don't begin to estimate the quantity of urine passed in twenty-four hours when the bladder is full, empty the bladder and let the reckoning count from the time of the last urination. Begin on an empty bladder and end on an empty bladder.

Don't fail to ask your patient for urine passed before breakfast, if it is impossible to get the whole twenty-four hours' amount. It is the blood urine.

Don't put the specimen on the shelf and let it undergo all kinds of changes before examining it. Such a specimen will tell nothing about the condition of the patient.

Don't leave specimens of urine uncovered. Dirt may fall into it and chemical changes are hastened by exposure to the air.

Don't get the urine in a dirty vessel. Bottles that are macroscopically unclean are microscopically filthy.

Don't forget that winter urine has a higher sp. gr. than summer urine, because the skin and other emunctory organs are not so active.

Don't think you have examined the specimen because you have made a chemical analysis.

Don't fail to examine every specimen with the microscope.

Don't make a microscopical examination until the urine has been placed in a conical glass and the sediment given time to settle.

Don't take a specimen of the sediment from the bottle. Casts are most apt to be found upon the topmost layers, because they are light and consequently are the last things to settle.

Don't think that casts mean recent nephritis.

Don't say that a patient never has albumen in his urine because one examination fails to reveal it. Albumen may appear in the urine at intervals of considerable time, even though the patient have an ever-present nephritis.

Don't forget that other symptoms of nephritis precede those of albuminuria and casts.

Don't think that oxaluria is an insignificant affair. It may cause a nephritis. Remember that each crystal has eight dagger-like points.

Don't forget that cubebs and copaiba cause a condition of the urine that responds to the test of albumen.

Don't fail to filter before examining the specimen for albumen.

Don't attribute unimportance to a negative urinalysis. It may be as important as a positive one for the exclusive method of reasoning is the best way to reach a diagnosis.

Don't neglect to look for urea in all cases of persistent headache.

Don't forget that urinalysis is a most important measure in the detection of the threatening uræmia of pregnancy.

Don't look in the urine for the diagnosis, prognosis and treatment of a given case. The urine is only one of the many things to be considered and does not reveal everything about the patient's malady.

Don't fail to keep a record of every urinalysis. Much valuable information of a practical nature can be obtained by collating these examinations.

Don't forget that, chemically speaking, the important things to look for are casts, tyrosine, leucine and oxalic acid.

Don't forget Dr. Formad's summary of urinary sediment. It is as follows: A sediment has no significance unless formed within twenty hours after the urine has been passed. Every white crystal is a phosphate or an oxalate, the distinction may be made by the microscope. Every yellow crystal is uric acid if the urine be acid; a urate if it be alkaline.

Don't fail to charge for the urinalysis when making out your bill.—Daniel Morton, M.D., *St. Joseph Medical Journal.*

A NEW QUANTATIVE TEST FOR SUGAR IN THE URINE.

The clinical methods in use at present for determining the presence of sugar in the urine are imperfect and leave much to be desired. Dr. Charles W. Purdy, in the *New York Medical Journal*, proposes a test solution which differs from those of Fehling and Pavy in that pure mannite is substituted for the potassium or sodium tartrate which is used in the preparation of the latter solutions. This suggestion was first made by Schmiedeberg, who believed that some organic product should be present in the alkaline solution of copper in order to prevent the precipitation of the blue protoxide of the latter, which would otherwise occur, and that the use of mannite would render the copper solution more stable. Dr. Purdy has added also glycerine, and his formula reads as follows: Sulphate of copper, 4.15 grammes; pure mannite, 10 grammes; caustic potash, 20.4 grammes; strong ammonia (sp. gr. 0.8880), 300 c. c.; pure glycerine, 50 c. c.; distilled water sufficient to make one litre.

The solution is prepared as follows: Dissolve the sulphate of copper in part of the water and add the glycerine and mannite. In another portion of the water dissolve the caustic potash. Mix the two solutions and when cold add the ammonia. Then add enough distilled water to make one litre and carefully filter. He claims for this test solution that it is entirely stable, simple and rapid in application, exceedingly accurate in results, and, on the whole, admirably adapted for clinical purposes.

The principle upon which the application of the test depends is the fact that a solution of cupric sulphate of definite strength, combined as in the formula, is reduced at the boiling point by a definite quantity of grape sugar, causing a complete disappearance of the blue color, and leaving a perfectly clear and colorless fluid as the resultant. Twenty-five c. c. of this solution are reduced by exactly one-fourth of a grain of grape sugar. The quantitative test should be applied as follows: Into a four-ounce glass flask are poured 25 c. c. (dr. vi.) of the test solution, to which are added 50 c. c. (oz. iss.) of distilled water, and the whole is heated to the boiling point over a spirit lamp. A pipette, graduated in minims and holding not less than a half drachm, is now filled with saccharine urine, and as the test solution begins to bubble lightly the urine is slowly discharged from the pipette—drop by drop—into the test solution until the blue color vanishes and leaves the solution colorless and clear. The number of minims it took to discharge the blue color of the solution contained just one-fourth of a grain of sugar. By multiplying this number of minims until the product is 480 (one ounce), the multiple thereof is the number of quarter-grains of sugar to the ounce of the urine tested. The accuracy of this test may be proven by using instead of urine a solution of grape sugar of known strength, say eight grains to the ounce, in which case fifteen minims will be required.

He cautions that the blue solution should be raised to the boiling point and kept slowly boiling, not violently bubbling; the urine to be tested should be slowly discharged from the pipette—drop by drop—two or three seconds elapsing between each drop, in order that the precise quantity may be determined which completely eliminates the blue color of the test solution.

As advantages from this test are enumerated :

1. Its rapidity of application : As a rule, the quantity of sugar in a given sample of urine may be determined in from five to ten minutes.

2. Its accuracy. When sugar is present in the urine in the usual clinical range of from two to thirty grains in the ounce, the quantity may be determined within from one-tenth to one-twentieth of a grain.

3. Its perfect cleanliness and simplicity of application. No copper products cling to the utensils (as in Fehling's test) or obscure the chemical reactions from view, and the apparatus is of that simple kind usually kept in the physician's office.

4. Its stability: This solution is quite stable, and, if the bottle containing it is corked to prevent the escape of the ammonia, it will keep almost indefinitely.—*Weekly Medical Review.*

Purdy's Test for Quantitative Determination of Sugar in the Urine.—Take of sulphate copper, 4.15 grammes; pure mannite, 10 grammes; caustic potash, 20.4 grammes; stronger ammonia (s. g., 0.880), 300 c. c.; pure glycerine, 50 c. c.; distilled water sufficient to make a litre. Dissolve sulphate of copper in a part of the water and add the glycerine and mannite. In another portion of the water dissolve the caustic potash. Mix the two solutions, and when cold add the ammonia. Finally, with the distilled water, bring the volume of the mixture to one litre and carefully filter. Twenty-five c. c. of this solution are reduced by exactly one-quarter of a grain of grape sugar. The test is applied as follows: Into a four-ounce flask are poured 25 c. c. (f. ʒ vi.) of best solution, to which are added 50 c. c. (f. ℥ jss.) of distilled water, and the whole is heated to boiling over a spirit lamp. A pipette, graduated to minims and holding not less than half drachm, is now filled with the saccharine urine, and as the test solution begins to bubble lightly the urine is slowly discharged, drop by drop, into the test solution until the blue color completely vanishes. The number of minims it took to discharge the color contained just a quarter of a grain of sugar. By multiplying this number of minims until the product is 480 (one ounce), the multiple thereof is the number of quarter grains of sugar to the ounce, which, if divided by 4, gives the number of grains of sugar in each ounce of the urine submitted to the test.

[This test is very beautiful and satisfactory, and seems to us to be all that is claimed for it. It ought to be stated that the discharged color returns on cooling of the fluid.—Eds.]

TENTH INTERNATIONAL MEDICAL CONGRESS, TO BE HELD IN BERLIN AUGUST 4–9.

At the request of Dr. A. Jacobi, of New York, we publish the following:

The Committee of Organization of the Tenth International Medical Congress, R. Virchow, President; E. von Bergmann, E. Leyden, W. Waldeyer, Vice-Presidents; O. Lassar, Secretary General, have appointed the undersigned members of an American Committee for the purpose of enlisting the sympathy and co-operation of the American profession.

We are assured that the medical men of our country will receive a hearty welcome in Berlin. The Congress promises to prove of inestimable value in its educational results, and in securing the ties of international professional brotherhood. It is most important that the American profession should participate both in its labors and its fruits.

Delegates of American Medical Societies and Institutions, and individual members of the profession, will be admitted on equal terms. The undersigned, therefore, beg to express their hope that a large number of the distinguished men of our country will appreciate both the honor conferred by this cordial invitation and the opportunity afforded us to fitly represent American medicine.

The Congress will be held at Berlin, from the fourth to the ninth of August.

The arrangements in regard to a few general meetings and the main scientific work, which is delegated to the sections, are the same as in former sessions. A medico-scientific exhibition, the programme of which has been published a few weeks ago, is to form an ingredient part. It is to the latter that the Berlin Committee is very anxious that both the scientific and the secular press should be requested to give the greatest possible publicity.

The office of the Secretary General is Karlstrasse 19, N. W., Berlin, Germany.

S. C. Busey, Washington, D. C.
Wm. H. Draper, New York.
R. H. Fitz, Boston, Mass.
H. Hun, Albany, New York.
A. Jacobi, New York.
Wm. T. Lusk, New York.
Wm. Osler, Boston, Mass.
Wm. Pepper, Philadelphia, Pa.
F. Peyre Porcher, Char. S. C.
J. Stewart, Montreal, Can.

CURRENT NOTES.

Loefler has found the bacillus of diphtheria in the mouth of a child who was not ill, which suggests that the bacillus is not offensive under all circumstances.—*Archives of Pediatrics.*

Fluoresceïn, a Color Tissue Test for Lesions of the Cornea.—Dr. Randolph, Johns Hopkins Hospital, expresses entire satisfaction with the use of fluoresceïn—a red soluble powder, one of the coal-tar products—to detect lesions of the cornea. A water solution is made, dropped in the suspected eye, and if there be only slight lesions they are detectable by the staining left at the seat of the injury, and it remains from a half hour to several hours.

Mr. John Hunter's Household in 1792.—James Finlayson, M.D. (*British Medical Journal*, March 29th, 1880), reproduces from a MS. volume by Mr. Clift, the faithful curator of Hunter's Museum, which is very interesting at this date, Mr. John Hunter's household in 1792. Among those of his household are mentioned Mr. Hunter, his wife, son and daughter. The eighth on the list we find "Mr. Francis Kinloch Huger, N. Carolina (House Pupil) 1 year." This entry is probably a mistake, as the Hugers are South Carolinians, but some of our Charleston readers may be able to say. Tenth on the list is "Mr. Henry Jenner, Nephew of Dr. Jenner, Berkeley, 1 y'r." Mr. Hunter's family never consisted of fewer than 50 persons provided for at his expense, "exclusive of House Pupils, who paid for their Board."

Attempted Suicide with Antipyrin.—A person took for severe headache, either to kill or cure, 120 grains antipyrin in tea. He vomited copiously an hour after. Passed a quart of urine which gave reaction for antipyrin—reddish-brown reaction with ferric chloride, disappearing on addition of sulphuric acid. Symptoms were flushed face, swollen conjunctivæ, face and brow hot, extremities cold, no cyanosis, pulse 108. [Temperature not given.] Respiration 38, heart's action violent, precordial pain, skin and tendon reflexes greatly increased, pupils large, sensitive. After two hours of intoxication came a sudden chill lasting five minutes, pulse then scarcely perceptible. Hypodermic morphia did not relieve him,

SUCCUS ALTERANS.

(McDADE.)

SUCCUS ALTERANS is a purely vegetable compound of the preserved juices of Stillingia Sylvatica, Lappa Minor, Phytolacca Decandra, Smilax Sarsaparilia and Xanthoxylum Carolinianum. as collected by Dr. Geo. W. McDade exclusively for Eli Lilly & Co., and endorsed by Dr. J. Marion Sims.

SUCCUS ALTERANS continues to gain favor from its remarkable Alterative and Tonic properties, *eliminating specific poison from the blood* and *increasing the proportion of red corpuscles in anœmic patients* to a wonderful degree; is endorsed by the medical profession and in use by many hospitals of note.

SUCCUS ALTERANS in venereal and cutaneous diseases is fast supplanting Mercury, the Iodides and Arsenic; and is a certain remedy for Mercurialization, Iodism and the dreadful effects often following the use of Arsenic in skin diseases.

SUCCUS ALTERANS is also strongly recommended for its Tonic and Alterative effects in many forms of scrofulous disease, and in all cases where anæmia is a factor. Such patients rapidly develop a good appetite, sleep soundly and gain flesh rapidly. Many cases are on record where patients increased ten to twenty-five pounds in weight in a few weeks.

SUCCUS ALTERANS is giving satisfactory results in treatment of *Chronic Rheumatism* and can be used with confidence.

SUCCUS ALTERANS may be given for any length of time, without injury to the patient.

SUCCUS ALTERANS is put up in pint round amber bottles and *never in bulk.*

Price, $2.00 per bottle.

Send for copy of our Hand-Book of Pharmacy and Therapeutics. Useful for reference and contains much valuable information.

PIL. APHRODISIACA.

(LILLY.)

Phosphorus and **Nux Vomica**, as is well known to the profession, act as powerful tonics to the nervous system, especially the spinal cord, and can be relied upon as possessing real aphrodisiac power. The **Damiana** used is the genuine **Turnera Aphrodisiaca.** By our process for the manufacture of **Phosphorus Pills**, a thorough subdivision of phosphorus in the mass is obtained, and, with a coating perfectly **protecting** it from **oxidation**, there is nothing to be desired. It is necessary that the administration of this pill be continued from **three to four weeks**, or until **the system is thoroughly under the influence of the remedy.** It is indicated in **mental overwork, sexual debility, impotency.** It is decidedly beneficial in cases of **nocturnal emissions**, the result of excesses, **mental apathy**, or indifference, and in an **enfeebled condition of the general system**, with **weakness or dull pain in the lumbo sacral region.** In diseases of the **reproductive organs** of the female, and especially of the uterus, it is one of our most valuable agents, acting as a **uterine tonic**, and gradually removing abnormal conditions, while at the same time, it imparts tone and vigor; hence, it is of value in **Leucorrhea, Amenorrhea, Dysmenorrhea**, and to remove the tendency to repeated miscarriages.

One Hundred Mailed on Receipt of $1.00.

SUPPLIED BY ALL DRUGGISTS.

ELI LILLY & CO., **Pharmaceutical Chemists, Indianapolis, Ind., U. S. A.**

HYDRASTININE

A POSSIBLE SUBSTITUTE FOR ERGOT.

THIS substance, an oxidation product of Hydrastine, white alkaloid of Golden-seal, was pr pared by us in order to afford opportunities for physiological investigation in European labor tories, and has been investigated at the laboratories connected with the Universities of Dorp and Berlin.

The results of the study of this medicinal agent would indicate that it is likely to superse Ergot in the control of hæmorrhage and is of especial service in uterine hæmorrhage. The alk loid, or base, being sparingly soluble, and, moreover, rather prone to decomposition when solution, we have given preference to the hydrochlorate as possessing the desirable elements stability and solubility in aqueous fluids.

From the *New York Medical Journal*, March 22, 1890, we quote a brief resume of some expe ments recently made with Hydrastinine in gynæcological practice:

Dr. Edmund Falk, of Berlin, gives an account of this new alkaloid, $C_{11}H_{13}NO_3$, which is formed, alo with o ianic acid, by gently heating a mixture of hydrastine and nitric acid and precipitating with an alka

Dr. Falk has made repeated experiments with Hydrastinine, and suggests it as a remedy in the treatme of uterine hæmorrhages as being much more prompt and sustained in its action than ergotine. Report is ma of twenty-six cases systematically and successfully treated with it. The twenty-six patients received in all fo hundred injections of Hydrastinine hydrochloride in the form of a solution varying from five to ten per ce There was no noticeable local irritation following these injections at any time. The patients were unanimo as to the painlessness of the applications and the freedom from that subsequent discomfort which so oft arises from the use of ergotine. The discoverer is making further investigations, the results of which are appear in due course in the Archiv für Gynäkologie.

HYSTERIONICA BAYLAHUEN:

A Remedy for Acute and Chronic Diarrhœa and Dysenter

THIS plant, which is a native of Chili, has been brought forward in the February 28th numb of the *Bulletin Général de Thèrapeutique* by Dr. Baillé, and also before him by Carvallo, Valparaiso, as a remedy of very considerable value in gastro-intestinal troubles, such as dysente colitis, and flatulence from intestinal dyspepsia.

We have pleasure in informing physicians that we have obtained genuine supplies of this dr and will furnish literature descriptive of it and samples for investigation on request.

Eligible Antiseptics, Anodynes and Digestives.

THE antiseptic and sedative treatment of intestinal disorders is a deservedly popular one and this class of remedies we would remind physicians of the Antiseptic Yellow Oxide of Merc Tablets which have proved of so much service in septic forms of dyspepsia, and prophylac against diarrhœa and dysentery. Samples mailed on request.

A preparation of much value as a sedative, anodyne and antispasmodic in disturbances of digestive tract incident to summer is Chloranodyne. This formula is an improvement upon Chlorodyne of J. Collis Browne, M.R.C.S.L., which has long been established in favor abroad.

The reputation of our pepsin products for purity and digestive activity, as compared w others made, has been thoroughly established. In digestive disturbances and for preparing p e gested foods for infants and invalids, our pepsin and pancreatin preparations will be found m convenient and reliable. We may mention the following forms in which we supply these ager

Pepsinum Purum in Lamellis, Pepsinum Purum Pulvis, Saccharated Pepsin, U.S. Lime Juice and Pepsin.

Glycerole Pepsin concentrated, Pepsin Cordial, Liquid Pepsin, U.S.P., Lime Juice a Pepsin.

Digestive Tablets, Lactated Pepsin Tablets, Pepsin and Bismuth Tablets, Pepsinum Pur Tablets (3 grs., sugar-coated), Peptonizing Tablets, Pancreatin, Pure, Saccharated, and P creatin Liquid Concentrated.

All information desired by physicians as to our pepsin and pancreatin products, preparing p digested foods, our general line of standard medicinal preparations, pharmaceutical specialties, a latest therapeutic novelties and improvements in methods of medication will be promptly furnis on request.

PARKE, DAVIS & COMPANY,

DETROIT AND NEW YOR

but camphor and ether were injected with good results. Patient recovered in two days.

Revue Internationale de Bibliographie Medicale, Pharmaceutique et Veterinære, under the direction of Dr. Jules Rouvier, made its first appearance for April, 1890. It is a faithful bibliography of current literature, extending in this number as far back as November, 1889. The work is admirably arranged for consultation, alphabetically as to general topics, also in the subdivisions, entailing an immense amount of work on the editor. We will be pleased to welcome its quarterly visits in the future, and shall place the volume side by side with Index Medicus, Index Catalogue and Neill's Digest.

Morphine Salts and Cherry Laurel Water not Incompatible.—A statement has been going the rounds that morphine was incompatible in cherry laurel water and the product dangerous. Prof. John M. Maisch (*American Journal Pharmacy*) shows that this must be an error. There is not, as alleged, precipitation of cyanide of morphine, the salt having been mistaken for the alkaloid morphine. Its appearance in a solution of morphine in cherry laurel water is probably due to the fact that the water was prepared with magnesia. This is an important correction, as the combination of cherry laurel water and morphine is a very valuable basis for cough mixture.

Warning about Exalgine.—In common with anilid preparations, exalgine causes cyanosis and other grave symptoms occasionally. It seems as though we hardly settle down upon "the very safest and best" of all these preparations, until we get a shock. The experience of this writer is worth narrating. A patient with pleurodynia was ordered a dose consisting of exalgine 3 grs. and 2 grs. quinine in three successive doses. It answered very well, apparently demonstrating the safety of the new drug. The next day exalgine was ordered by itself in 5-grain doses. The first dose produced alarming symptoms—cyanosis tingling sensation in the hands, dyspnœa hemianopsia, but no sweating. Depression lasted many hours. So much for the "entirely safe" exalgine. Excellent remedy, doubtless, but should be used with discretion.

WHAT WILL THE DRUGGISTS DO ABOUT IT.—A Wilmington druggist has been making some observations on the habits of the negroes in burying their dead. He says a custom now prevails here of planting the empty bottles on the grave-mounds. This is quite a distinction, as it has all the force of an epitaph without making any positive declaration as to the cause of the death—the passer-by can draw his own inference by reading the labels. We advise our druggist friends to have their names blown in the bottles, with such moral lessons on them as they wish to inculcate, and, to make more sure the value of the advertisement, be choice in the selection of their glassware. Let none be deluded by the thought that the fewer the bottles ornamenting the grave the safer their reputation, the inference will be quite the contrary. The statement that copœba and black-wash labels have been found near these graves lacks confirmation, but as the matter will be investigated the Smithsonian Institution had better be looking after the results.

THE USE OF ALCOHOL IN HOSPITALS COMPARED WITH MILK.—A very interesting report has been presented to the British Medical Temperance Association by Drs. Morton Moir and Pearce, on the administration of alcohol in hospitals. The Committee have drawn up a series of tables full of instructing figures, instituting a comparison between the amount expended under this head in 1863 and in 1888. The remarkable fact is noted that in these twenty-five years there has been, from the returns made by 113 hospitals, an increase of 300 per cent. in the charge for milk and a decrease of 47 per cent. in the charge for alcohol. A second table gives returns from 60 hospitals of which no previous record could be found. On the basis adopted by Dr. Fleetwood Buckle, in his report on 1863, these 60 hospitals showed a decrease of 39 per cent. in the expenditure for alcohol per bed. A third table shows the comparative alcoholic charges per bed in 1863 and 1888, respectively. In 73 hospitals there had been an increase of 2,108 beds, and a decrease of total average cost per bed of £78 3s. 5d. Beds have thus increased at the rate of 25 per cent., while the amount expended on alcohol has decreased at the rate of 47 per cent. Only eight of this group of hospitals showed an increase in the quantity of alcohol consumed. In the remaining 65 the decrease ranged from 30 to 83 per cent. In the London Fever Hospital, while milk has risen from £650 per annum the disbursements for alcohol were at the rate of only 15s. 24d. per bed in 1888, as compared with £3 5s. per bed in 1863. In St. Bartholomew's Hospital the milk bill had gone up from £600 to over £2,000, while the alcohol bill had gone down from £1,446 to £953. These statistics prove that there has been a gradually decreasing rational medical administration of alcohol, the credit of which must be awarded to the medical staffs of the hospitals, a fact which affords yet another proof of the lively interest in the promotion of temperance taken by the medical profession.—*British Medical Journal.*

TEST FOR IRON.—A solution of neutral sulphide of soda containing a little pyrogallic acid has been proposed as a test for copper. A few drops of it mixed with a dilute solution of a salt of copper produces a red color similar to that which is developed by the addition of sulphocyanide of potash to a solution of a persalt of iron. The test is much more delicate for *iron*, as the following experiment will show: Dissolve 0.7 gram ammonia-ferrous sulphate (=0.1 gram iron) in a liter of water; it will be 1 part in 10,000. To 10 c. cm of this solution add water to make 100 c. cm, this will be 1 to 100,000. Dilute some of this by adding four times its bulk of water, it will then be 1 in 500,000. Make a saturated solution of sodium sulphide, and separately a solution of pyrogallic acid 0.5 gram in 50 c. cm in water. Put some of the iron solution in a wine-glass, add 4 drops of the solution of sodium sulphite and afterward 2 drops of the pyrogallic solution and a purple color will be developed. This test with distilled water alone develops a light pink shade, which, however, soon fades. This is due to the trace of free ammonia which it usually contains. Iron produces a purple tint. The test is so delicate that it will detect iron in 100 c. cm of water, in which a bright cambric needle has been immersed for an hour.—By Samuel J. Hinsdale, Fayetteville, N. C.—*Pharmaceutical Record.*

PROGNOSTIC SIGNIFICANCE OF MODERATE CARDIAC HYPERTROPHY AND DILATATION.—Dr. Charles Sheard (*Canadian Practitioner*) says: 1. A diseased valve may be restored to functional activity and leave no ill effects. 2. The diseases of the heart most liable to cause sudden death are, aortic regurgitation and fatty disease. 3. That in aortic stenosis the patient has generally the longest lease of life given with any valvular disease, and may live for years after moderate hypertrophy exists. 4. That aortic obstruction and aortic regurgitation, when associated, is the most grave of all cardiac lesions. 5. Lesions of the mitral valve, both obstructive and regurgitant, are slow in causing death. 6. Simple irregularities in the heart's beat may be classed with functional disorders as not showing liability to organic disease.—*Lancet-Clinic.*

CAFFEINE.—Drs. Sée and Lapicque have made some valuable researches on the action of caffeine, the results being published in the *Bulletin de l'Académie de Médecine.* They find that, when given in small doses, the drug facilitates muscular labor by increasing the activity, not of the muscle itself, but of the corresponding cerebro-spinal centre. This diminishes the sensation of effort and keeps off fatigue. The drug certainly prevents, for a time, labored breathing and palpitations due to effort. It is a mistake to suppose that it checks waste. There is no such thing as effort and action without corresponding waste; indeed, the one implies the other. More correctly, caffeine allows more exertion through a kind of physiological usury. The ingestion of aliment allows of a certain amount of exertion, but fatigue always come on before all the assimilated products of digestion are used up. Thus a reserve is left. Caffeine uses up more or less of that reserve. Hence the drug is only of temporary benefit. When employed for too long a time, especially when no fresh food is at hand to make up for waste and to afford more reserves, caffeine is, as might be supposed, actually noxious.—*Brit. Med. Jour.*

THE LIGATION OF VARICOSE VEINS OF THE LEG.—Dr. Charles Phelps, in an interesting paper (*N. Y. Med. Jour.*, December 28th, 1889) gives the following directions for the ligature of varicose veins of the lower extremities: In the ligation of varicose veins, as in all other operations, antiseptic methods and precautions in preparing the limb, in operating and in dressing should be scrupulously observed. If, however, by neglect of these, some suppuration occurs, he has not found it to do serious harm beyond the trouble it occasions in multiplying dressings and detaining the patient in bed. The distance between the ligatures should vary in accordance with the size and varicosity of the vein and its apparent or probable anastomoses. In long stretches of large but comparatively straight veins the intervals should not be greater than from one to two inches. Where there are masses of dilated and convoluted veins forming a tumor, it is impossible to include it in the ligatures, and they must be applied all around it and as closely as possible to it, embracing every immergent and emergent vein that can be discovered. He uses a catgut suture taken directly from the juniper oil and as small in size as possible consistent with necessary strength. The ligatures should be carried by a straight needle, preferably the Keyes-Reverdin, immediately behind the vein, and the needle unthreaded and withdrawn. The needle is then carried immediately in front of the vein through the openings which it has previously made, and the end of the ligature caught up and brought back. The vein is thus subcutaneously included in the ligature, which is then tied and cut short, and, if the catgut is fine enough, the knot pushed back beneath the skin. If, however, the vein is larger, and coarser catgut has to be used, no trouble results from leaving the knot in the orifice of the wound; in fact, he prefers it. After the dressings have been applied, the limb should be placed upon a posterior splint and the patient kept in bed for about ten days or two weeks, after which he should wear a roller bandage for two months. The number of ligatures necessary to be applied is a matter of absolute indifference. The patient will recover just as rapidly whether he has few or many. He restricts the operation to: 1. Cases where this condition constitutes disability in physical examination—as for admission to the army or navy, or for appointment in a municipal department. 2. Cases where the size of the veins, the formation of venous tumor, or the attenuation of the coats or tegumentary coverings threaten hemorrhage. 3. Cases where chronic ulceration or eczema exists. 4. Cases where circulation has been so far impaired as to occasion swelling of the feet or loss of power in the limb.—*American Jour. of the Med. Sciences.*

Succinate of Iron in Gall-Stones.—Succinate of iron is an amorphous reddish-brown powder, insoluble in water and alcohol. According to Dr. Buckler, in combination with chloroform it is very efficacious in gall-stones. The chloroform is given in ten-drop doses from four to six times a day, and the succinate of iron in teaspoonful doses after each meal. Its use is to be continued for months, until complete solution of the stones takes place and the tendency to their formation is overcome.—*Medical Press.*

LOTION FOR PRURITUS VULVÆ.—

Carbolic acid	15 grains.
Tincture of opium	4 drachms.
Dilute hydrocyanic acid	2 “
Glycerin	4 “
Distilled water	4 ounces.

Mix and apply as a lotion; or the following may be used:

Hydrochlorate of cocaine	7 grains.
Lanolin	1 ounce.

Make into an ointment, apply a small quantity to the area involved.—*Gazette Gynecologie.*

LASSAR'S TREATMENT OF THE SCALP.—The first to arouse physicians from lethargy in the treatment of alopecia was Lassar, the well-known and able docent for diseases of the skin at the University of Berlin (*Der Fortschritt.*) In an article on the diseases of the hair he puts forth his method which he had tried in more than 1,000 cases of alopecia pilyrodes and areata, and gives the following directions: 1. The scalp must be well lathered with a strong tar soap for ten minutes. 2. The lather is removed first with lukewarm followed with cold water in abundance, after which the scalp is thoroughly dried. 3. The scalp is then rubbed with the following solution:

℞.—Sol. hydrarg. bichlor. corr	0.5:150.0
Glycerin	
Spirit. or cologn. aa	50.000

M—Sig. Ext.

4. The scalp is rubbed dry with solution of—

℞.—Beta naphtholi	0.5
Absol. alcohol	100.00

Mix.

5. After this the scalp is thoroughly annointed with a liberal application of the following preparation:

℞.—Acidi salicylici	2.00
Tr. benzoin	3.00
Ol. ped. taur. q. s. ad	100.00

Mix.

This procedure must be kept up for six to eight weeks, and be repeated every day. But few cases resist the treatment, and often after a few applications the downy sprouts may be seen.—*Buffalo Medical and Surgical Journal.*

THE CONTINUED USE OF BLUE MASS IN SMALL DOSES.—The patient selected to illustrate the effect was a man 55 years of age. About a year ago he gave evidence of heart failure. He had dyspnœa on exertion, difficulty in going up stairs or lifting weights, increasing œdema, and albumen in the urine without casts. He had been treated in various ways, chiefly by iron in conjunction with diuretics, as acetate of ammonia or nitrate of potash. The symptoms steadily increased until the œdema invaded the trunk and genitals, and he was almost confined to his room. When he came under treatment repeated trial was made with similar remedies, but finding no good result, and that the digestive system was in fairly good condition, the following pill was ordered : Mass. hydrargyri. pulv. digitalis, cinchonidiæ sulph., aa gr. xl. Fiat mass. et div. in pil. No. xl. S.: One pill three times a day. These pills were begun November 10th, and were continued regularly until November 22d, by which time the full number had been taken. He was also ordered to remain in bed until 7 o'clock each morning, thus securing at least eight hours rest. During the day he was directed to lie down for one hour. The only appreciable action of the remedy was a steadily improving tone of cardiac action, with increased secretion of urine, with diminished proportion of albumen, and progressive decrease of œdema. There had been no purgation and no evidence of mercurial action. The change in his appearance was extraordinary, as he seemed shrunken away, showing that the entire body had been infiltrated with serum. He felt weak, but the only remedy ordered was an ounce of whiskey twice daily. Upon this he rapidly regained his strength, and now seems in very good condition and ready to return to work. I have in some cases of general œdema, both with weak heart and with organically diseased heart, given the above combination for much longer periods than in this case, and with remarkably good results. If the mouth is frequently washed with a solution of chlorate of potash, there does not seem much danger of ptyalism, but a constant close watch for this should be kept up. The remedies should always be joined with carefully regulated hygiene and diet.—William Pepper, M.D., *University Magazine.*

TURPENTINE OIL IN CATARRHAL AFFECTIONS OF THE RESPIRATORY ORGANS.—I have repeatedly made on myself the experiment of immediately suppressing commencing irritation of the nasal cavity by inspiring the vapors of ethereal oils, especially turpentine oil. The result was always zero and the affection followed its way into the bronchia. At the end of December last, consequently in the influenza epoch, I again experienced, after two hours' walk in the foggily humid air, the first symptoms of irritation in the nasal cavity as far back as the uvula. This time I tried inspiration of vapors of turpentine oil treated with potassium-hydroxyd. The result was surprisingly favorable. It so happened that for the purpose of a chemical operation there had been mixed in a bottle 9 volumes rectified turpentine oil, 1 volume ordinary petroleum and 1 volume of an alcoholic solution of potassium hydroxyd (1 part weight of potass. caust. in 5 parts' weight of absolute alcohol). The mixture was thoroughly shaken and then allowed to settle. From fourteen to fifteen minutes five slow inspirations through the nose were executed, the nose being kept close to the neck of the bottle. After five or six times' repetition of this performance, the irritation which had existed was completely suppressed. To make more sure of it, I repeated the same operation on the three days next following. Whether an influenza with affection of the respiratory organs, or whether a simple cold in its first stage was cured, it would be impossible to decide. However, the favorable result obtained (which most likely depends on immediate application) is a strong recommendation for the repetition of the experiment. Whether the presence of petroleum is necessary for curative effect, whether it is necessary to employ so concentrated a solution of potassium hydroxyd, and whether (as is very probable) a solution of sodium hydroxyd is equally appropriate, has not been ascertained. As is obvious at the first glance, turpentine oil, treated in this way, is free from any acid formed by oxydation, and it may be that the cause of this favorite result in comparison with ordinary turpentine oil is to be found in this circumstance. Not to forget accidental circumstances, it should be mentioned lastly that the mixture referred to had remained in a half-filled bottle for about fourteen days before its use, and had never been exposed to the action of direct sunlight. —By Franz Kogelmann, Chemist in Graz.—*Deutsche Medizinal Zeitung.*

A PREPARATORY MEDICAL SCHOOL AT THE UNIVERSITY.

NC Med J (os) 25: 317, #5, May 1890

It is announced by advertisement in this Journal that Dr. Richard H. Whitehead will open a Preparatory School at the University. Dr. Whitehead brings to his work many of the best elements of a teacher, and he will do faithful work. As a teacher, he is firmly convinced that Anatomy and other elementary studies do not receive the due proportion of time, and the personal attention of teachers in most medical schools. In this school will be taught all these branches with thoroughness and personal attention to students, drilling each one in Anatomy by actual dissections. That such a school is needed cannot be denied, and we wish it all success, more especially as we learn that it is the intention of Dr. Whitehead and the University Faculty that this course shall not be at the expense of academic training, and that there is no intention to make this medical course stand in lieu of a medical term and so shorten and cheapen a term, but to give intending students of medicine a broader foundation, carrying out the spirit of the medical profession as expressed in their Board of Medical Examiners.

* * *

Physicians' Books of Account are ‘Privileged.”—A local court has decided that a debtor who is a physician cannot be compelled to deliver up his books of account to his receiver, who has been appointed in proceedings supplemental to execution. By the order appointing the receiver the latter acquired title to the accounts but not to the books as well. “In the complicated affairs and relations of life the counsel and assistance of clergymen, physicians and lawyers often become necessary, and to obtain them men and women are frequently forced to make disclosures which their welfare, and sometimes their lives, make it necessary to be kept secret. Hence, for the benefit and protection of the confessor, patient or client, the law places the seal of secrecy upon all communications made to those holding confidential relations, and the courts are prohibited from compelling a disclosure of such secrets. The safety of society demands the enforcement of this rule.” For this reason it is held that the physician's account books, containing information which would be privileged as concerns his patients, are not subject to discovery and inspection in an action between the physician and a third person.—*N. Y. Medical Journal.*

OBITUARIES.

B. F. Whitaker, M.D.

At a meeeing of the Halifax Medical Association, held in the town of Halifax on Monday, 7th day of April, 1890, the following resolutions were reported and adopted by the Association :

Whereas, an all wise Providence has taken suddenly from our midst Dr. B. F. Whitaker, a valued and honored member of this Association, be it therefore

Resolved, That, in the death of Dr. Whitaker, this Association has lost not only an esteemed and useful member, but society and the community in which he lived has lost a valuable and honored citizen. As a citizen, he was useful and self-sacrificing; as a friend, he was consistent and appreciative; as a husband and father, he was kind and indulgent; as a neighbor, he was generous; and as a gentleman, high-toned and respected by all who knew him. In a word, he was a worthy representative of that long line of honored ancestry of which he was so worthy a descendant. As a physician, he possessed those qualities and qualifications which rendered his ministrations safe and appreciated by his patrons.

He joined the State Medical Society in 1854 with one of the authors of these resolutions, and though from his active engagements in agricultural pursuits, in çonjunction with the duties of his profession, he never became a regular participant in its deliberations, yet he was ever a well-wisher to its success, and rejoiced in the prosperity it has achieved.

He was a member of the Methodist Protestant Church, of which he had been a consistent member from his early manhood, and though taken from among us suddenly, and without warning, his consistent life left sufficient evidence that he trusted in his Saviour, and has gone to meet the reward of a well-spent life.

Resolved, That a copy of these resolutions be spread upon our minutes, and that copies be sent to the family of the deceased, the *Roanoke News*, the *Scotland Neck Democrat* and the North Carolina Medical Journal for publication.

A. B. Peirce,
R. A. Patterson,
Jno. O'Brien.
} Committee.

Henry Hollingsworth Smith, M.D.

Dr. Henry Hollingsworth Smith, the eminent and well-known surgeon, died at his residence in Philadelphia, April 10, after an illness of ten days, in the 75th year of his life. Dr. Smith was born in Philadelphia, December 10, 1815. He was graduated from the College Department of the University of Pennsylvania in 1834, and was graduated from the Medical Department of the University in 1837. He was Resident Surgeon of the Pennsylvania Hospital for two years, and then spent some time in various European hospitals. He became Surgeon to St. Joseph's Hospital in 1849, Surgeon in the Episcopal Hospital soon afterwards, and one of the surgical staff of Blockley Hospital in 1854. In 1855 he was appointed Professor of Surgery in the Medical Department of the University of Pennsylvania, and resigned to become Professor Emeritus in 1871.

At the beginning of the civil war he was appointed to organize the Hospital Department of Pennsylvania, and at the same time made Surgeon-General of Pennsylvania. In this capacity he contributed much to the efficiency of the medical service of the Pennsylvania Reserves and other State regiments. After thoroughly organizing the department of which he was in charge, he resigned his commission in 1862, and has since been actively engaged in the practice of his profession. He won the warmest thanks of uncounted relatives by inaugurating the system of embalming the dead on the battle-ground.

Dr. Smith was widely known as a medical author and teacher, and he took an active interest in the questions of medical politics which have engaged the attention of the profession in this city and throughout the country during the past few years.—*Medical and Surgical Reporter.*

George Thurber, M.D.

In the death of Dr. Thurber American botany and horticulture have lost a leading mind. Dr. Thurber's connection with the medical profession was not immediate, his influence upon the profession of pharmacy was marked and important. He began his career as a druggist, and his fondness for plants led him into the field of botany, in which for more than thirty years he was an active worker and an authority. His first botanical work was with the survey of the Mexican boundary, in which he spent four years. He was a lecturer in the New York College of Pharmacy, and afterwards in the Agricultural College of Michigan, resigning this latter work to take editorial charge of the *American Agriculturist*, in which position he labored until a few years before his death, which occurred a few days ago.

There were few naturalists in the country who had the accomplishments of Dr. Thurber. His facility and clearness of expression, and his ready knowledge, were the admiration of scores of diletante who sought his assistance in scientific diagnosis. To his numerous correspondents he was always courteous and helpful, exhibiting an astonishing amount of patience with the scores of persons who with more curiosity than scientific desires, sought his opinion.

His work on the "*Weeds and Useful Plants of America*," which was an elaboration of Dr. Darlington's work, is still consulted with profit, and all the botanical articles in the *American Encyclopedia* were from his pen.

READING NOTICES.

HYSTERIONICA BAYLAHUEN.—*A Remedy for Diarrhœa and Dysentery, Acute and Chronic.*—Parke, Davis & Co. announce that they have obtained genuine supplies of this promising plant, and are prepared to furnish samples to physicians of a fluid extract for further trial.

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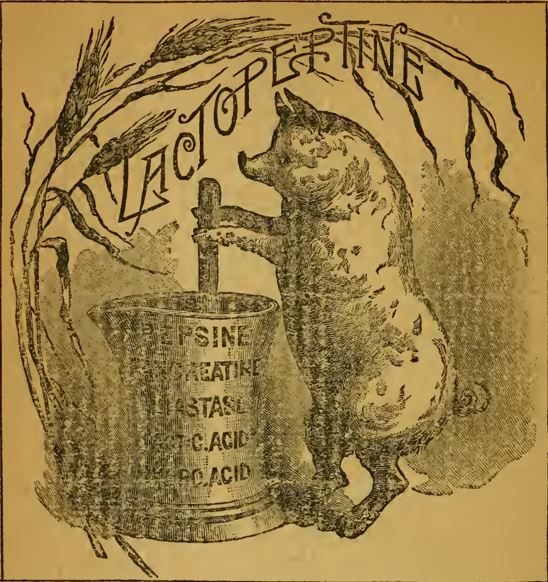

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MEDICAL JOURNAL.

THOMAS F. WOOD, M. D., } Editors.
GEO. GILLETT THOMAS, M. D., }

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ORIGINAL COMMUNICATIONS.

LAPAROTOMY FOR REMOVAL OF THE UTERINE APPENDAGES.

By R. A. Kinloch, M.D., Charleston, S. C. (Read at the Meeting of the South Carolina Medical Association, at Laurens, South Carolina, April 24, 1890.)

I desire to call to the attention of the Association, and to put on record, six cases of Laparotomy, more recently performed, all of which have recovered and afforded good results.

I shall give a mere synopsis of the clinical histories, taken from my daily notes, and thus avoid the tiresome details with which the profession have now become almost too familiar in the periodical literature of abdominal surgery. These cases are presented in the chronological order in which they were treated.

CASE 1.

Miss L., aged 47, native of South Carolina. During her entire adult life suffered from disordered menstruation, sometimes with excessive, and again with scanty, flow. November, 1879, after exposure to cold, suffered with abdominal pains referred to bladder and ovaries. After this, suffering was common, and always greatest at times of her periods. Treated by two physicians with hot water vaginal injections, counter irritations and use of pessaries for, so-called, uterine displacement. Had many attacks of pelvic peritonitis; hysterical manifestations common, and at times there were indications of mental derangement. Her brother, an excellent physician, had finally such fear of her losing her mind that he desired me to take charge of the case, and suggested the advisability of Laparotomy for relief. The menopause, occurring four years since, had induced no improvement. After some observation and general treatment, I accepted the brother's view of the case, and operated at the St. Xavier's Infirmary, July 16, 1889. Both ovaries presented signs of chronic inflammation, and, together with the tubes, were firmly adherent to adjacent structures. Much trouble was experienced in breaking up adhesions and bringing the appendages sufficiently forward to apply the ligatures. Portions of omentum were cut away, and ovaries and tubes removed. Glass tube inserted, after washing cavity with warm water. No antiseptic was used for cavity. After three days glass tube removed and a rubber tube of smaller caliber inserted, as there was still some sero-bloody discharge. This latter tube left in position three days longer.

On the 20th bowels were moved by means of calomel ($\frac{1}{4}$ gr.), which had been given every four hours during the day previous, because of continued nausea.

23d.—Temperature for the first time reached 100°. This was apparently due to a small parietal abscess which now discharged itself.

28th.—It was observed that some pus came from the deep parts, along the track formerly occupied by the drainage tube. This track was carefully cleansed and a tent of iodoform gauze carried to the bottom of it. It was daily treated in this way until the discharge ceased. Convalescence was long retarded by this suppuration, but no serious symptoms were ever presented. At this date, April 30th, 1890, the patient is in enjoyment of most excellent health.

CASE. 2.

Mrs. R. was brought to me from the interior of the State. She had married at 14, and had been an invalid ever since. Had three children, the eldest 9 years old. Symptoms of ovarian irritation had commenced soon after marriage; the usual abdominal pain, back-ache, bearing-down feeling, bladder troubles, etc., etc. For the last two years patient had been bed-ridden, and insisted that she could neither stand nor walk. Of course many of the manifestations of disease were hysterical. Entered the St. Xavier's Infirmary about the middle of November. Her physician stated that every kind of treatment had been exhausted without benefit, and urged Laparotomy. The case was kept awhile for observation and with a view of eliminating the hysterical features before resort to operation. My final conclusion was that an operation afforded the best chance for recovery. This was performed November 29th, 1889. Right ovary was found enlarged and cystic; the left one exceedingly hard and of half the normal size; no adhesions. Both ovaries and tubes were removed. Wound closed without drainage. Case progressed most favorably. Temperature never exceeded 101°, and this only on the evenings of the 12th and 13th days. The rise in temperature was not associated with any peculiar condition of the wound. During several days the evening temperature reached 100°, while in the morning it was only 98° or 99°. At the expiration of three weeks the patient left for home. I have no recent account of her.

CASE 3.

Mrs. B. came to me from Florida, October 25th, 1889. Aged 24; married, and a mother of two children. An invalid since the birth of the first child, four years ago. Bed-ridden for the last year. Patient was emaciated and sallow, countenance distressed. Menstruation usually excessive. The usual back-ache, with burning feelings in groins and down thighs; some leucorrhœa, constipation and anorexia. Examination disclosed unilateral fissure of cervix, much relaxation of the vagina and perineum and prolapse of left ovary. I determined first to close the laceration of the cervix, but gave the opinion that a Laparotomy for removal of the ovary would be required.

I will pass by the account of the operation on the cervix, except to say that the fissure was only superficially pared, contrary to my usual plan, and no thickness of tissue removed. Patient was not willing to return home without feeling more certain of relief, and after the repair of the cervix continued to complain of the old ovarian pains. Laparotomy was done on December 8th, 1889. Both ovaries were found very large and cystic, and the tubes also were of abnormal size, one of them irregularly dilated, and showing also small cystic formation, which at first sight suggested tubal pregnancy. Both ovaries and tubes were removed. No adhesions of consequence. With the exception of nausea and trifling vomiting, this patient recovered promptly. Temperature never exceeded 99½°. After the 15th day, however, the bladder gave much trouble and the patient insisted that she suffered much pain of a burning kind in the womb and through to the vagina. The desire to urinate was frequent and urgent. The urine contained much mucus. I forcibly dilated the urethra and neck of the bladder, and washed out the viscus with warm boracic acid solution. Three days after this the patient returned home, with my reluctant consent. After reaching home the irritability of the bladder continued, and, although in other respects improving, Mrs. B. preferred to return here for advice. I saw her on the 1st of April, 1890. Upon examination I found that the bladder was not now giving trouble, but the uterine cervix was large, hard and tender, and patient located most of her distress in this region. It will be remembered that I had not exsected much of this tissue when operating for the fissure of the cervix. I now split the external os, and with the scissors freely excised the indurated tissue. The wound was treated by suturing, as after the more serious lacerations. Patient has recovered entirely from this operation and is now beginning to walk about. Has none of her former severe pelvic or abdominal symptoms. Has a good appetite, and promises soon to be restored to better health.

CASE 4.

Mrs. M. came to me from Florida. Aged 39. Married at 15.

Never had a child at term, but had had 15 or more miscarriages; been an invalid for 20 years; bed-ridden for most of the time during the last two years; habituated to taking morphine, though used it in no very large doses; had been treated by numerous physicians for the usual chronic ovaritis, but without any relief. Entered St. Xavier's Infirmary December 19th, 1889. I determined first, if possible, to cure the patient of the morphine habit, or to so far withdraw the drug as to enable me to ascertain her real condition. This I succeeded in doing only in part, as, unfortunately, Mrs. M's home physician had come with her to the city, and now visited her every day. He had reached the conclusion that a little morphine every day would be necessary until relief should be obtained by an operation.

December 31st, 1889.—Laparotomy performed. Both ovaries and tubes removed. The ovaries were cystic, large and nodular at certain points. No serious symptoms ensued. Temperature never exceeded 99°. Her old nervous symptoms, restlessness and insomnia gave some trouble and required the judicious use of morphia, bromides, etc. Patient left the Infirmary and returned home before the expiration of a month. Very recently I received from her a message that she was jubilant in health and hardly believed herself the same woman.

CASE 5.

Mrs. S. came to me from Summerville, in this State, and entered the St. Xavier's Infirmary. Aged 36; married; had triplets her first confinement; three children since in as many labors. Had been sick off and on with uterine and ovarian troubles before the first labor, and continuously sick ever since. Had, according to her physician's account, verified by my own observations upon several occasions, suffered from repeated attacks of pelvic peritonitis, always accompanied by gastric disturbance, with long periods of excessive nausea and vomiting. Upon several occasions death from starvation had been imminent; life had been sustained by rectal alimentation. There was almost constant pelvic and abdominal pain, great emaciation, febrile paroxysms at times, and pseudo attacks of rheumatism in the hips. Every means of treatment had been resorted to, and the patient implored any operation that would offer relief. Beyond a slight retroversion of the uterus, with tenderness of the peri-uterine tissues, nothing could be discovered by vaginal or other examination. Laparotomy was determined upon as an explorative measure, but with the fixed belief that the uterine appendages were diseased and bound down by adhesions. To prevent recurrent attacks of pelvic peritonitis, the indication was to break up adhesions and remove the appendages. After entering the Infirmary the patient had a severe febrile attack, with pain, nausea, etc., which induced the suspicion of malarial infection as a further complication. This was treated on general principles, including free use of quinine, opium, purgatives, etc. Operation of laparotomy January 7th, 1890. Both ovaries and tubes were found bound down by strong adhesions and were with the greatest difficulty detached. The tube on the left side was so fixed by its fimbriated extremity to the parts of the ligament contiguous to the pelvic brim, that I divided it between a double silk ligature and left the extremity in its abnormal position. The other tube and both ovaries were finally removed. An abscess was found in one ovary. Hemorrhage was active, but controlled to a large extent by hot water and temporary packing with sponges. A large-sized glass drainage tube was fixed in position, and an iodoform gauze strip carried through its caliber to the bottom of the *cul-de-sac*, the upper end of the strip protruding through the opening of the tube to act as a syphon and assist the drainage. The condition of the patient was long critical and alarming before her final recovery. The symptoms were most variable and complicated, and it required cool judgment, careful discernment and much caution, at times, to successfully meet the indications presented. Vomiting, restlessness, wakefulness, pain, flatulence, constipation, diarrhœa and a uniformly high temperature for many days, were all severe tests of the therapeutic resources. Upon the whole, I regard the case as the most desperately ill one that I have ever seen recover.

The range of temperature during the first seven days was from 100° to 102½°. During the next septenary period 102° and 103° was noted some part of almost every day. The drainage tube had been removed after the 3d day. On the 15th day, after vomiting had been so continuous as to prevent all attempts at nourishing the patient by the stomach, reliance having been placed simply upon rectal alimentation and stimulation, a vaginal examination led me to believe that I had to deal either with a peri-uterine cellulitis, resulting in abscess, or with a purulent collection in the Douglas *cul-de-sac*, tending to escape by the vagina or rectum. The tissues around the cervix were œdematous and brawny to the touch. I at once exposed the vaginal *cul-de-sac* by means of a Sims' speculum, and made a deep perforation, posteriorly, and close to the cervix, with a hypodermic needle. The barrel of the syringe was soon filled with gas and sero-pus, which emitted a very offensive odor. A long narrow bistoury was now thrust in the direction formerly given to the needle, when at once there escaped about an ounce of fetid pus. This abscess cavity was washed out with a weak bichloride solution, and a spiral drainage tube of small caliber inserted to the depth of about four inches. The vaginal canal was loosely packed with iodoform gauze, for its antiseptic influence, and to aid in retaining the drainage tube in position. The more serious symptoms of patient now began to subside. The temperature on the 2d day after opening the abscess fell to normal; vomiting, however, persisted for some days longer, and the diarrhœa that had given much anxiety subsided only slowly. Fortunately I had to deal with a patient who had much tenacity of life. I give but little credit to the therapeutic agents employed. The patient left the Infirmary the end of February, and remaining a week in the city, daily gaining health and strength, she returned to her country home. As reported to me since, the fatigue of the journey by carriage and railroad induced once more a serious spell of sickness, the nature of which I am unacquainted with. She is now slowly recovering.

CASE 6.

Mrs. L. Age 27. Married at 15; never conceived. Enjoyed good health up to three years ago, when she began to suffer at intervals from ovarian pains, and at times from painful and excessive menstruation. Suffered first with acute attacks of pelvic pain, or inflammation, while at Glenn Springs, in September, 1889. This was followed by constant sickness, loss of appetite, insomnia, etc. Some time during September she had a sudden discharge of muco-purulent matter from vagina, which continued for two days, and amounted, she thinks, to a gill or more. In January, 1890, the lady had lost 28 pounds in weight, and in March 38 pounds. She thinks that in January she began to have fever every day. On Jan. 22d she went into the country, where she was soon confined to bed. There was now great pain in ovarian regions, and central pain over pubes, or bladder, frequent menstruation, diarrhœa, with large mucous discharge following the fœcal flow, anorexia, great emaciation, insomnia and a daily temperature of from 101° to 103°. Menstruation had never been irregular. It was usually free and lasted from six to eight days.

In the above condition the patient was brought to the city. The case was a bad one and the prognosis gloomy enough without an operation. After an examination, my diagnosis was chronic ovaritis, with adherent ovary, and possibly an abscess of ovary or a pyo-salpinx. A central soft and tender swelling at the fundus of uterus, and felt a little above the pubes, I could not understand. I regarded laparotomy as affording the best, if not the only, chance for recovery. The patient sought the operation, and was cheerful, brave and confident. Laparotomy was performed March 11th, 1890. Left ovary found to be cystic and as large as an egg, firmly fixed in the left fossa. It was scarcely traceable until a layer of adventitious membrane, which seemed to stretch over it, was freely broken through and disconnected by the fingers; indeed, a regular dissection was required to isólate it, so that it could be brought into view. The abdominal wound had to be enlarged so as to admit the hand, before the object could be accomplished. The left tube, throughout two-thirds of its extent, was dilated and formed a pyosalpinx. The ovary and tube were ligated and removed. And now I searched in vain for the right ovary and tube. These were so displaced and covered up as to elude search. In the central line, however, and seemingly springing from the fundus of the uterus was a separate cyst, with thin walls, the size of a "guinea egg." This corresponded with the external painful swelling recognized at first through the abdominal parietes. To remove this cyst entire it would become necessary, as it then seemed to me, to remove the uterus. I preferred to adopt another plan. I broke through the cyst wall with the end of a scissors blade and tore as much of it away as possible. Then I freely scraped the interior of the small portion of the cyst that rested upon the uterus. Hemorrhage was not active. The abdomen was, as is usually done with all of my cases, flushed with hot water, a glass drainage tube inserted, and the wound closed. To shorten the clinical history of this interesting case I will simply say that recovery took place without an untoward symptom. The drainage tube was removed on the second day. Patient menstruated on the 14th of March, the third day after the operation. She sat up out of bed on the 25th of March. The progress since has been remarkable. Menstruation appeared again on the 14th of April. Appetite, sleep and strength have all returned; color has come to the face and the original weight and good health seem to have been reached. I may state in passing that this case resembles in some respects one reported by Dr. Brewis, of Edinburgh, and alluded to by Mr. Tait in his recently published book, page 338. Like that case, although before the operation, the right side was most complained of, the diseased ovary and tube were found on the left. Unlike the case alluded to by Mr. Tait, however, this one recovered promptly, while that one died "because of an uncompleted operation." What the future will bring forth in connection with the undiscovered appendages of one side, as above reported, remains to be seen.

REMARKS.

In presenting these brief histories I may conclude by stating that the operative procedures and after-treatment were conducted under the methods of the most successful practitioners in the line of abdominal surgery, and in accordance with the surgical experience of my own professional life.

As an anæsthetic, I resorted to the mixture of ether and chloroform, two parts to one, as recommended by Mr. Tait, the A. C. E. mixture of Billroth. The ligatures used were of antiseptic silk, as small as was consistent with the necessary strength. These were secured by using the Staffordshire loop with its single knot. No antiseptic solutions were used either for the abdominal wound or cavity. In place of these, boiled cistern water served the purpose. This was used abundantly for flushing the cavity, and was introduced in through a glass tube of large caliber passed down into the deepest part of the *cul-de-sac*. Sometimes the water was made to penetrate as well between the coils of the intestines, and to pass over the omentum. The patient is finally turned upon the side to permit the escape of the water which had entered the cavity. The omentum was carefully pressed out of the way while dealing with the parts to be removed. The intestines, when in the way, or protruding, were handled with delicacy, and kept covered with soft flannels wrung out of warm water. In the majority of the operations, the intestines were not disposed to protrude. The abdominal incision was made midway between the umbilicus and the pubes, and was seldom more than two and a half inches in length. It was enlarged, by cutting upwards with the scissors, when it became necessary to get the entire hand into the cavity. All bleeding points in the parietal wound were treated either by fine silk ligatures or by hæmostatic forceps temporarily applied. Bleeding within the cavity was treated by fine silk ligatures, or, if deep and coming from broad surfaces, the result of breaking up of adhesions, by hot water and temporary packing with sponges. Shreds of omentum or adventitious fibrinous bands were cut away with the scissors after first ligaturing them with silk. The drainage tube was inserted above the lowest abdominal deep suture, and passed down as deeply as possible, whenever there had been hemorrhage from the rupture of adhesions. A strip of iodoform gauze, or a piece of lamp-wick, made aseptic, was made to occupy the whole length of the caliber of the tube, and was left protruding through its external orifice. The abdominal wound was closed by deep sutures of silk-worm gut, half an inch apart, passed through all the parietes, usually by means of the long, delicate Hagedorn needle. The needle punctures through the peritoneum were made a little further from the margin of the wound than were those through the integument. These latter were placed one-third of an inch from the free margin. Superficial sutures of catgut or of fine silk, were placed between the deep sutures of silk-worm gut. The line of the wound was then carefully cleansed of all coagula, or other matters, by washing the tegumentary surface with a weak bichloride solution. After drying with a soft towel, the wound was dressed simply with several thicknesses of iodoform gauze, and over this was placed a layer or two of absorbent cotton. The whole was kept in position by a few strips of good rubber plaster, going half around the abdomen. A separate covering of iodoform gauze and cotton rested over the orifice of the tube, when this was used. My object generally has been to keep the wound dressing as dry as possible and not to disturb it for many days. When, however, drainage is going on through the tube, the dressing will become wet and require to be in part, at least, frequently changed. This has never in my experience interfered with primary union of the wound. I am of the opinion that in most cases the wound, after being secured with sutures, both deep and superficial, might be dusted with iodoform, salol, or boracic acid, and left without other dressing. Deep sutures are removed on the eighth day. Drainage through the tube is often assisted by gentle syringing with boracic acid solution, or by passing into the tube a flexible wire, or long delicate forceps, carrying pieces of absorbent cotton.

DIETETIC AND MEDICAL TREATMENT.

This is of the utmost importance. Absolutely nothing but an occasional mouthful of hot water is allowed for forty-eight hours. This is preferable to ice, which patient often craves, and seems better to allay thirst and nausea. No anodyne is given unless there is great pain or restlessness, then morphia is given in small doses hypodermically. If nausea or vomiting ensue, and continue to the end of the second day, a minute dose of calomel, $\frac{1}{8}$th or $\frac{1}{4}$th of a grain, is administered every two or three hours. On the third day the bowels are moved by warm enemata or by Seidlitz powders given in fractional doses at short intervals. After this, peptonized milk is allowed, tentatively, in spoonful portions. Or chicken tea, from which the fat has been removed when cold, may be substituted for the milk. If the stomach retains, and digestion seems to go on, the diet may be more liberal and in accordance with the desire of the patient and the judgment of the physician. There is not much danger of any case being starved to death. Sleeplessness and general restlessness are met with the bromides, or these with chloral hydrate, given by mouth or rectum. There are cases where nothing will serve except the careful use of morphia. Alcoholic stimulants are rarely needed; usually, I think, they prove injurious to the stomach. Bovinine and brandy I gave by the rectum with advantage in the case of Mrs. S. She at times would also retain a few drops of this mixture in the stomach, while milk was generally ejected.

SELECTED PAPERS.

ANNUAL ADDRESS OF THE PRESIDENT BEFORE THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION, AT THE MEETING HELD IN NASHVILLE, TENNESSEE, NOVEMBER 13, 1889.

By HUNTER McGUIRE, M.D., LL.D., Richmond, V., Late Medical Director of the "Stonewall" Jackson Corps (2d), Army of Northern Virginia, C. S. A.

Fellows of the Southern Surgical and Gynecological Association, Ladies and Gentlemen:—It is with unassumed diffidence that I appear before you to-night as the presiding officer of this body, and I approach with great hesitation the task of delivering the annual address, in compliance with the established usage of all assemblies of this kind in America.

I feel confident that there are many present who would fill the office with more ability, and that it would have been better for our Society if another had been chosen in my stead. I desire in the commencement of my remarks to return my thanks to my fellow-members for the honor they have conferred upon me by calling me to preside over the deliberations of this, our Southern Association.

It has been suggested that there was no need for the existence of this Society; that the State, National and International Medical Associations were sufficient for all that was required for the progress and development of medical science. This was a mistake, as I hope I may be able to show. There is need, throughout the whole South, for county and State associations, and a special need for the existence and perpetuation of this organization.

It goes without saying that union and coöperation have become as indispensable to scientific bodies as in the material walks of life. In all human enterprizes every advance accomplished is by coöperative work. In this way laws are perfected, agriculture improved, philosophical investigations consummated, political and philanthropic reforms attained; by it railroads and canals are built, just and equitable laws enacted, civilization extended, tyranny and oppression overthrown, the Gospel preached and civil and religious liberty secured. By union and coöperation alone can the science of medicine be advanced. Isolated, individual men who, in the pride of self-reliance and self-sufficiency, reject the aid and sympathy of their contemporaries, are failures. They may have great ability, they may be faithful and enthusiastic workers in the departments to which they have devoted themselves, but in the end they are disappointed, because they have overestimated their individual strength and have not sought the companionship and concurrence of others. No class of men appreciate the value of co-öperation more than the medical men throughout the world. Germany, Austria, France and England have for years shown how coöperation can bring about medical progress through the deliberations of the respective assemblies that are annually held in these countries. The people of this country, also, in their State and general societies have added much to the development of medical learning. So highly is coöperative work appreciated by the medical world that the necessity for an International Congress a few years since became imperative. I need not tell this audience what it has already accomplished. At its last meeting, held in Washington, the nature and extent of its labors can only be understood by the examination of the five volumes that contain the contributions of its members: the work is a medical library in itself. America—ever alert, energetic and industrious, always anxious to obtain and practically apply that which is best—has been no laggard in her endeavors to promote the advancement of medical science. Through the American Medical Association how much has been accomplished! In its grand meetings are brought together some of the ablest men of the land. Historic figures, many of them have become, and the fruit of their labors will hand them down through ages as among the foremost of their day and generation. Her sister Society, the American Surgical Association, although younger, has just cause to be proud of her work. Her field is necessarily restricted to one of the great divisions of medicine—a division of the highest importance. That the field has been well worked, that the harvest has been rich and abundant, and that it has been gathered into our storehouses, I take it for granted none will deny. So I might refer to other associations, and to the Congress of these associations, did time permit.

It may be said with truth that, until of late, the South has not kept pace with the North in medical progress and development. This has arisen from a variety of causes. Prior to the late war slavery was antagonistic to the development of dense populations; fertile areas were monopolized by the large planter, and he generally occupied more space than his agricultural needs required. He believed in what he called "plenty of elbow room." He was opposed to outside intruders and desired neither the development of towns nor the growth of cities in his vicinity. Criticise this policy as you may, condemn it if you will, I am not engaged in defending it, but am merely stating patent facts, in order to account for the manner in which it retarded the development of medicine. While this was true, yet this state of society produced splendid men and women, probably the grandest on this continent. Culture, grace, elegance, self-reliance, were its legitimate offshoots. Orators, poets, statesmen, soldiers, scientists, lawyers, ministers and physicians—the first and greatest in the whole land came out of it. What orator have we like Henry or Yancy, what poet like Poe, what scientist like Matthew F. Maury, what statesman like Jefferson, what jurist like Benjamin, what divine like Hoge, what soldier like Stonewall Jackson, what surgeon like Sims? And the women—how can I describe them! They were as cultured as they were refined, they were as beautiful as they were queenly; the loveliest of sweethearts, the noblest of matrons.

Let us look for a moment and see from whence these people of the South came, and what they have done.

The colonial settlers of the southern portion of North America were kindred by ties of blood, by association and by the laws of common inheritance. They came to this country deeply imbued with the idea of civil liberty. In many instances they were descended from a superior element of the English people. The blood of the cavalier coursed through their veins. They were prepared to organize a government, to undertake the herculean task of creating a country out of chaos. And they accomplished it.

To these settlers were soon afterward added another stream of immigrants, who came into the South through Maryland and Virginia and through the seaports of the Carolinas and Georgia. These were the God-loving, tyranny-hating Scotch-Irish, who have left their distinguishing characteristics to this day upon the people of every State in the South, from Maryland to the Rio Grande.

When the struggle came for the defence of their rights against the mother country, how quickly her sons took up arms in defence of the common cause, and how nobly they performed their part it is useless to say, for is not the history of the time filled with accounts of their patriotism and achievements? At the council board, on the platform and in the field they stood preëminent. The enunciation of principle, the declaration of rights, sprung from the fertile brain of a Southerner, and to-day the readers of American history recognize in Jefferson the foremost thinker of his age. Well has a New Englander, in speaking of Washington and the Southern soldiers of 1776, recently said: "We must go back to Athens to find another instance of a society so small in numbers and yet capable of such an outburst of ability and force." Without the men of the South the Revolution of 1776 would have gone down into history as the Rebellion of that period.

How wonderful it is that in the comparative seclusion and solitude of an agricultural country the men should have been reared whose writings on constitutional government embodied the wisdom and the experience of the patriots of all ages, and whose State papers actually formed the mould in which the Constitution of the United Colonies was shaped; and that then, after Southern statesmen had formed the most perfect government the world ever saw, that Southern soldiers should have made it *an accomplished fact* by their skill, valor and endurance.

Edmund Burke, in his speech before the British Parliament, March 22, 1775, on the conciliation of the American Colonies, spoke thus of our peeple:

"There is, however, a circumstance attending these Colonies which, in my opinion, * * * makes the spirit of liberty still more high and haughty than in those of the northward. It is that in Virginia and the Carolinas they have a vast multitude of slaves. * * * And these people of the South are much more strongly and with a higher and more stubborn spirit attached to liberty than those to the northward. Such were all the ancient commonwealths, such were our Gothic ancestors, and such in our day, the Poles; and such will be all *masters* who are not slaves themselves. In such a people the haughtiness of domination combines with the spirit of freedom, fortifies it and renders it invincible."

Men of Southern birth and Southern rearing were the successful generals in the war of 1812, and the central figures in 1846. The acquisition of territory was made during the administration of Southern men; Louisiana, Florida, Texas and California were acquired during their terms of office. Upon the Supreme Court bench of the United States they are to be conspicuously found. The Chief Justiceship was held continuously for sixty-three years by Southern men. I need not speak of the orators and statesmen produced by every State in the South; they are household names.

History but repeats itself; like occasions produce like results. The patriot of to-day is but the reflex of the patriot of the past. In our late civil contest—if it be proper to call it so, for was it not rather two sovereignties waging war, the one against the other?—the men of the South once more displayed the same great qualities that had characterized their ancestors in the American Revolution.

Modern Europe stood aghast at the daring of a people they had been taught to regard as effeminate. They had expected that an ephemeral struggle would be made near akin to those which had frequently taken place among the mixed Spanish populations to the south of us. Climate, temperature, the pernicious effects of slavery, were all believed to have had their influence, and to have produced a weak and vacillating people. Had luxury enervated them, had they become effeminate, had the increase of wealth and the impress of slavery rendered them physically and intellectually inferior to the men of the North? If any so believe, let the deeds of arms that have passed into history speak. Examine the details of the well-contested battle-fields, and see if such a declaration is true. Jackson, Lee, Johnson, Claiborne, Stuart and Forest! What tender thoughts, what hallowed associations, gather around the names of these bright stars in the Southern constellation! Does all history, does even the field of romance, furnish heroes superior or patriots more noble? They were the leaders of an equally brave and noble people, who, when all save honor was lost, submitted to the inevitable with a dignity born only of true greatness.

And now of the Confederate surgeon let me say a word. How can I express in adequate terms my admiration for him! He possessed virtues peculiarly his own. Coming from civil life, it was wonderful to see how rapidly he adapted himself to the discipline of the army and conformed to the requirements of military life. The hardships he endured and the privations to which he was subjected soon transformed him from a novice to a veteran; and I can say with truth that, before the war ended, some of the best military surgeons in the world could be found in the Confederate army. His scanty supply of medicines and hospital stores made him fertile in expedients of every kind. I have seen him search field and forest for plants and flowers whose medicinal virtues he understood and could use. The pliant bark of a tree made for him a good tourniquet; the juice of the green persimmon, a styptic; a knitting-needle, with its point sharply bent, a tenaculum; and a penknife, in his hand, a scalpel and bistoury. I have seen him break off one prong of a common table fork, bend the point of the other prong, and with it elevate the bone in depressed fracture of the skull, and save life. Long before he knew the use of the porcelain-tipped probe for finding bullets, I have seen him use a piece of soft pine wood, and bring it out of the wound marked by the leaden ball. Years before we were formally told of Nélaton's method of inverting the body in chloroform narcosis, I have seen it practised by the Confederate surgeon. Many a time I have seen the foot of the operating table raised to let the blood go, by gravitation, to the patient's head, when death from chloroform was imminent; and I will add that in the corps to which I was attached chloroform was given over 28,000 times, and no death was ever ascribed to its use. Many of the medical officers of this corps were wounded or killed on the field. One I saw fall at Strasburg amid the cheers of soldiers at the evidence he gave of devotion to duty; another at Sharpsburg, facing an assault before which even veterans quailed and fled; and a third I found upon the bloody field of Cold Harbor, dying with a shell-wound through his side. As I knelt down beside him and told him his wound was mortal, he answered, "I am no more afraid to do my duty." They were splendid specimens of a noble race—a race whose achievements astonished the world and wrung from the foe himself a full measure of praise. During the terrible six days which followed the retreat of our army from Richmond, the medical men, by their unswerving devotion to duty and cheerful support, contributed no little to inspire the heroism which turned our defeat into honor and made Appomattox one of the proudest memories of the war.

The social condition of the South, while it offered unusual and rare advantages to her sons generally, denied to the medical men, save in exceptional instances, the opportunities which were conducive to the progress and development of medicine. This peculiar society gave to them, however, boldness of thought, independence in investigation, and they possessed the courage of their convictions. They thought well and they thought clearly; they fought their way into position at every leading medical centre in the country. Many of them started life in small towns or rural districts, and, after testing their strength and gaining the confidence born of experience, they generally moved to the larger cities North and South. Is it more than necessary to mention Frick, Goodman and Smith, of Maryland; Hartshorne, Clapman, Horner, Mitchell, Mütter and J. L. Cabell, of Virginia; Jones, Charles, Caldwell and Dickson, of North Carolina; Geddings, Bellinger, Toland and Sam H. Dickson, of South Carolina; Miegs, Arnold, Bedford and Anthony, of Georgia; Eve, of Tennessee; Nott and Baldwin, of Alabama; Stone and Jones, of Louisiana; Dudley, McDowell and Yandell, of Kentucky, to recall to your minds the great instructors in medicine in this country? How well they performed their part is prominently shown in the lasting impressions they have left behind them. Historic they are, and historic they will continue to be; untold generations will arise to bless them, and they will not fade into obscurity through the lapse of time.

How can I speak, except in terms of reverence and praise, of the practitioner who remained with his country *clientèle*, and yet established a national reputation. Struggling under disadvantages which can only be appreciated by those similarly situated—with paucity of material and the absence of professional association, with the requisite elements of success arrayed against him—he must be a man of genius who advances an idea, demonstrates a fact, constructs a principle, or invents an operation of sufficient importance to arrest the attention of the medical world; truly he must be a man of profound genius. Of such men were Crawford Long, of Georgia; Mettauer, of Virginia; McDowell, of Kentucky; Sims, of Alabama—Sims, the greatest and grandest of all the men who have recently passed away. Satisfying the requirements of a continent, he traversed the ocean in order to give to Europe the benefit of his learning and experience. He claimed among his patients one or more members of the crowned heads of Europe. The relief that he afforded suffering humanity from diseases that before his day were classed as incurable, can only be estimated by those who have examined the subject in detail. He was the pioneer of gynecological and abdominal surgery. The fundamental truths established by him will be remembered, their utility recognized, and their principles applied, so long as surgery is a science. He passed away in the full zenith of his glory—beloved, respected and renowned. The bronze statue that is to be erected by his professional friends over his mortal remains will bear but feeble attestation to the reverence in which he is regarded by the civilized world.

Would that good taste and the proprieties of this occasion permitted me to mention the names of men in the profession, living now in the South, who have achieved for themselves great renown. Some of these gentlemen I see before me to-night, and I congratulate them upon the fame fairly won by their genius. To the medical students, here in such numbers this evening, these distinguished men will say, as they of all others know, that genius is only hard work well directed. Some future speaker, filling the place I occupy now, in fitter and more eloquent words will tell another audience the names of these men, and they will go down into history as great and grand as those that I have just mentioned.

Organization must be our watchword. In a country where all is progress, where material resources are being rapidly developed, the medical men of this section must not prove laggards.

Agriculture is in a state of progressive advancement. Our mineral wealth is at least appreciated and turned to valuable account; the hum of the loom, the ring of the anvil and the sound of the forge, resound throughout the land. Our waste places are no longer desolate. The increased growth of agricultural products is amazing. The cotton crop of 1888 is more than double the crop of 1860, the time at which it was believed the South had reached her heyday of prosperity.

Last year (1888) the value of the crops in the South was the largest on record, and yet this year (1889) the value of the agricultural products alone, it is estimated, will be increased $125,000,000. Statistics show her rapid growth in other industries to be fully as great, if not greater. And this is the legitimate outcome of the courage, sagacity and industry of her own people—of a people born and reared under the Southern sun. For there is no New South—the blood of her patriots of the past flows in the veins of her people to-day, unmixed by any other strain. Blessed with an unequalled climate; with fertile lands, whose products are most varied and abundant; with coal, minerals and precious stones, in quantities exceeding the wildest imaginations; inhabited by people who have shown to the world their patriotism, endurance and valor; with the surplus negro population relegated to Mexico, toward which country, in the providence of God, it is now drifting—the South is advancing and improving in every way.

Villages are springing up in every direction, towns and cities are being located at all important commercial points, and those already established are marked by annual increase both in wealth and population. All these tend to the advancement of the object we have in view. Already there is scarcely a community that is not sufficiently dense to furnish clinical material to those engaged in active practice. How much there is to be learned about diseases peculiar to this South-land of ours—the manner in which malaria affects the population; where the miasma is generated; the way it modifies and alters other diseases and surgical conditions existing in the same sections; how acute attacks show themselves; in what way chronic malaria exhibits itself, and the pathological changes it brings about—all these should be studied. The effect of prolonged heat in summer and damp cold in winter are conditions worthy of your attention. The drainage of our wet, alluvial regions and the general improvement of our hygienic conditions, are grave problems to solve.

We cannot afford to become mere borrowers; we must be contributors to this, our beloved science. Remember, the thought of to-day may be the dogma of to-morrow. He who elucidates an idea, establishes a fact, or creates a system, is a universal benefactor of mankind. How this should stimulate the good men to become workers in this direction !

Modern inventions have annihilated space as to time, and by so doing have brought into a common fold the scientific men of every country and clime. The thought of to-day to-morrow is the property of mankind.

For all these reasons, gentlemen of the Association, it becomes a matter of paramount importance that you should stimulate your brethren to organize societies in every section of the South. Never leave off trying until county societies are established and actively at work in every county in each Southern State. Foster and encourage the State and district societies; establish close relations with them, and, when desirable, induce their members to become your members. If the plan proposed is even partially carried out, before many years this Society will become one of the most important in this country.

One thing is needful for the elevation of the moral, as well as the scientific, status of our profession, and that is harmony and good-will for our fellow-workers. Nothing contributes to this so much as these annual reunions; by these meetings rivalries cease, distrusts are dispelled, and kindly relations established; old friendships are confirmed, new friends made, and greater tolerance and charity prevail. We are made to see that, in the somes meagre and uncertain scientific facts in our calling, there is reason for honest difference of opinion. To these meetings every patient and conscientious worker can bring his contribution and add it to the common stock of ascertained knowledge. Let us cultivate a broad and generous appreciation of each other's work; let us eliminate every particle of envy at the success of others; let us heartily commend all who have enlarged the boundaries of our science or who have improved its art. Let us remember that the man who can appreciate what is excellent in others, is the man most likely to accomplish what is excellent himself.

Gentlemen of the Southern Association, let our motto be lofty aim and united action. As Southern men, let us show to the world that, under changed conditions, we have still the stamina of our forefathers. As members of our beloved profession, let us strive to be first in scientific attainment, first in integrity, first in high purpose for the good of mankind.

SOME FACTS IN THE HISTORY OF DIPLOMA MANUFACTURE IN THE UNITED STATES.

By Austin A. Martin, Esq., Boston, Mass.

The recent action of the authorities of the University of Berlin in refusing to recognize American diplomas in their university calendar, again brings forcibly to mind the infinite harm done to the good name of American physicians by the wholesale manufacture of diplomas in this country. The appeal of the medical schools of Maryland to those of the rest of the United States, to unite upon some plan of action for improving and regulating medical education, will, it is hoped, result in some uniform and useful action in this direction, and tend to raise the standard in all honest and *bona fide* medical schools. Much as the general standard of medical education might doubtless be improved here, it is probably not this, but the wholesale and outrageous manufacture and sale of fraudulent diplomas in the past, that has influenced the German authorities in their action. It is the purpose of this action to review briefly some of the leading facts in this unsavory record of rascality.

A diploma is essentially a good thing to have. The veriest quack would naturally prefer one from one of the best medical schools of the country, to hang conspicuously in his office. He would much rather not enrol himself in the ranks of "natural healers." He wishes to be respectable, and by dint of "doctoral conduct" and persuasive arts to take good rank in the profession. He knows the power of wheeding manners, unblushing effrontery and shrewd longheadedness. He knows it is of no use to go to any of the leading medical schools. That would involve at least three years' study and attendance. He has no time or inclination for such old-fashioned methods. He does not dare to insert his name in the diploma of a deceased physician. That is too risky. How to meet the difficulty: The genius of John Buchanan, of Philadelphia, the great inventor of diploma manufacture, pure and simple, rose to the occasion and supplied the long-felt want. The first requisite was that the diploma should be conferred by a regularly chartered medical college; second, that it should be attainable in the shortest possible time; and third, that it should be handsomely engraved, and sealed in due form, and, preferably, in Latin. His reputation was not such as to make it probable that, even in the slipshod manner in which legislation is often conducted, he could form new colleges by special charter. In the emergency it occurred to him to get control of, and revive some regularly-chartered colleges which had practically perished of inanition, but whose charters had never been annulled. This was not difficult to manage. Armed with the college seal, and blank diplomas, taken from some dusty drawer or closet, and bought for a small sum, he was in position to start in trade. Subsequently he did succeed in getting charters for one or two new colleges, which were conducted in the same way as the old ones. Indeed, emboldened by this success, he also sold diplomas purporting to come from institutions which had not even the pretence of a legal existence. It was rather, however, on those which had an actual legal existence that he relied. Then commenced a most wholesale and disgraceful manufacture and sale of diplomas. The difficulty was, that this rascal controlled colleges whose charters were still in full force, with "a faculty," like "men in buckram," it is true, but yet capable of signing their names legibly to a diploma. The whole farce was kept up, even to holding meetings of the "faculty" and keeping records of their proceedings, and issuing lecture tickets and certificates of matriculation. Indeed, until he became bolder, and took other steps which brought him within reach of the law, his graduates were legally doctors of medicine. he had the audacity to test the question in the courts, which were obliged, under the facts in the case, to sustain the legality of his charters. Emboldened by this, he became more and more reckless, openly advertised his diplomas, and had agents for their sale both here and abroad. Immense numbers were sold in Europe, especially in Germany, where the American Minister at Berlin openly denounced them as fraudulent.

He was finally caught by a newspaper man, John Norris, of the Philadelphia *Record*, to whom, under various fictitious names, he sold no less than eight diplomas, conferring several degrees of M.D., one of D.D., one of D.C.L., and one of LL.D. Some of these were technically legal in form, but some absolutely fraudulent. Upon his arrest the whole paraphernalia of his fraudulent operations were captured, and ample evidence to convict him was secured in his correspondence and papers. A full *exposê* was published in the Philadelphia *Record* of June 10 and 11, 1880. His subsequent confession, giving full particulars of his operations, and implicating other individuals and institutions, appeared in the same paper, March 25, 1881.

To Buchanan belongs the discredit of first systematizing and cheapening the manufacture of diplomas. Doubtless the thing had gone on in a sneaking amateur manner before his time. It is not difficult to conceive that, in some of the inferior colleges, where the requirements were not very strict at the best, a pushing fellow who had decided to become a doctor, and to whom a delay of a year was a serious drawback, might make it an object for some needy or friendly instructor to pass him speedily in his particular course. The example might prove contagious; another might be found equally indulgent; until finally the payment for a year's tickets, and an actual stay of six or eight weeks would suffice to turn out a full-fledged M.D., against whom nothing could be said legally. True, he might be utterly incompetent, with no knowledge of his profession beyond a few scientific words and phrases hastily culled from the fields of learning, but there he was—a doctor of medicine in name and legally.

These puny efforts were nothing compared to the Napoleonic proceedings of Buchanan. He it was who degraded American diplomas to such an extent in Europe that their name became a term of reproach, and good and bad were confounded together. The authorities at Berlin, in explaining their recent action, are reported to have said that, while they admit the existence of many excellent schools in America, they cannot attempt to discriminate between these and the fraudulent and worthless institutions which have disgraced, and still disgrace America. They urge the laxity of American laws in the matter of conferring degrees, as the reason for this step.

Buchanan's capture and imprisonment excited much public attention at the time, but the details of such matters are soon forgotten. The charters of his colleges were annulled; but many of the persons upon whom he had conferred degrees were legally doctors of medicine. There might be a cloud on their title in the eyes of honest men who knew the facts, but the parchment conferring the degree of M.D. remained.

The criticisms of the German authorities upon the lax state of the law and the lack of uniformity as to any proper standard of medical education in America are unfortunately too just. The opportunities for quacks have been and are far too available. No better example of this can be found than the laws of Massachusetts between 1874 and 1883. Up to 1874 a special charter from the Legislature was necessary in order to form a medical school. In 1874 an act was passed (Acts 1874, ch. 375) which, whatever may have been the intention of its framers, materially enlarged the scope of the existing law. This chapter provided in substance, that seven or more persons could form a corporation under the general laws, for "any educational, charitable and religious purposes, for the prosecution of any antiquarian, literary, scientific, medical, artistic, monumental or musical purposes," etc. It allowed such corporation to assume any name not previously in use by any existing Massachusetts corporation, and to prescribe by its by-laws the officers and agents by whom the purposes of its incorporation might be carried out. No capital was required, no restrictions as to the character of the instructors or the course of study—practically nothing to restrict its action. There was no provision expressly authorizing such corporation to confer diplomas, but there was nothing to prevent its doing so. No clause making it a crime or misdemeanor. What an opportunity! Slovenly and loose as legislation is apt to be, many a bold quack would hesitate before joining clairvoyants and other loose fish with himself, and applying in regular form to the Legislature for a special charter for a medical school. Some pretence of stability and honesty of purpose would probably be required. But how different the ordeal under this indulgent statute! Six associates, five dollars for the certificate of incorporation, and, presto! the thing was done! Next a name, preferably a colorable imitation of that of some long-established school in another State, and then a well-executed plate in the Latin language, purporting to confer the degree of M.D., which work of art could then be sold to such as chose to buy. Several medical schools were actually formed under this statute, and given a name and existence by the authority and certificate of the State. The history of all of them is not known. One, which showed an honesty of purpose, was subsequently authorized by special law to confer the degree of M.D. One, the "Bellevue," so-called, was detected in selling its diploma, without any pretence of a course of study, to a person under a fictitious name, who in his assumed character showed himself to be absolutely illiterate. The case was brought before the United States Commissioner at Boston upon a charge of using the mails for the purpose of defrauding, the diploma having been sent through the mail. The accused were discharged, the Commissioner ruling that nothing in the laws of Massachusetts prevented the school issuing its diploma to whomsoever it pleased. How many more such cases occurred is not known, but it is not uncharitable to suppose that there were many others. The Legislature soon afterward passed an act (Acts 1883, ch. 286) forbidding these colleges formed under general laws conferring degrees, under a heavy penalty. None of the certificates of incorporation granted to them, up to the date of this later act, have, however, been revoked. Even the dishonest "Bellevue," so far as is known to the writer, still has a legal existence.

The instance of Massachusetts is cited merely as a well-marked example of the dangers of such loose and careless legislation.

Similar deficiencies exist in other States. All such facilitate the creation of utterly irresponsible schools, under a show of legal right. It is perfectly easy to stop this, by insisting upon a special charter for the formation of a college.

On the other hand, maintaining a high standard of medical education is by no means an easy problem for the Legislature. It should, if possible, be attained, in the first place, by the combined and honest efforts of the best schools, fixing some standard of time and character of study below which no medical diploma should be granted. This standard should then be enforced by legislative enactment. Finally, no one should be allowed to announce himself as a doctor of medicine without such recognized diploma, or until after a suitable examination by a thoroughly competent board. It may be difficult to prevent persons actually practising medicine or surgery without a degree. Patients stubbornly insist on their right to have anyone they please attend them. Let it be so. The status of such practitioners would be defined. The State, however, can and should see to it that no diploma be granted by any college except upon a thorough examination in a curriculum of a high standard. I am aware that legislation looking to the regulation of the practice of medicine is difficult to accomplish, owing to an unreasoning popular prejudice. The laws of the various States differ widely. In some there is no restraint whatever; anyone may call himself a doctor of medicine, may practice and collect fees without diploma or license, Others have a more or less effective system of licensing after examination. Illinois, through the State Board of Health, has done excellent work in the matter of careful examinations, and in exposing fraudulent institutions. Difficult though it be, something like a uniform and effective system of examination and licensing should be brought about. The law should draw the line sharply between the honest and well-educated man, and the quack or incompetent, who, either with knavish purpose, or with culpable ignorance, would pose before the public with the insignia of a learned profession.—*Medical Record.*

INTERESTING CASE OF SYPHILITIC IRITIS—ABSCESS OF THE IRIS AND EVACUATION OF ITS CONTENTS.

James L. Minor, M.D., Memphis, Tenn.

During the past spring I treated a case of syphilitic iritis, which was interesting because of its variety, for I have never seen its counterpart; instructive because of its history, for it was characteristic of the general disease—syphilis—upon which it depended; and gratifying in its results, for so perfect a recovery from so severe an attack rarely occurs, and, too, some points in the treatment were novel and successful.

The notes of the case are as follows :

On February 2, 1889, Dr. Alexander Erskine referred to me for treatment A. V. M., æt 39, an iron-moulder, who gave the following history :

Ten days before the right eye and cheek were burned by molten metal. The eye became red and painful at once, and vision was seriously impaired. This condition continued up to, and was complained of at, the time that I saw him. The burn of the cheek was slight; it gave little trouble, and was practically well; nor could I discover any lesion of the eye from the burn. I did find deep ciliary injection of the globe, haziness of the anterior chamber, a contracted and stationary pupil, which yielded irregularly to atropia; and, projecting from the tissue of the iris, in its lower and outer quadrant, was a well defined cauliflower-like mass, with a yellowish apex and reddish-yellow base, the redness being due to minute blood-vessels which radiated from the base toward the apex. His vision was so much reduced that he could count fingers only at a distance of two feet from the eye. The picture was a typical one of syphilitic iritis, and the diagnosis of syphilis could have been made by these appearances alone. Inquiry elicited the fact that he had had a chancre a year before, followed by swelling and soreness of the glands in the groins and neck, whitish sores in the mouth, ulcerated sore throat and a general cutaneous eruption. He was seen by a physician who pronounced the trouble syphilis, and treatment was instituted which caused a disappearance of the troubles for which he sought relief. The medicine was then stopped, and no other evidence of syphilis was experienced until shortly after the eye became sore, when there was an eruption of slightly elevated, copper-colored spots over the general cutaneous surface. The throat became sore at the same time, and ulceration of the pillar of the fauces was observed on the right side. Atropia was used vigorously, hot fomentations were applied to the eye, and leeches were applied to the temple. Mercurial inunction was resorted to, and that remedy was pushed to the limit of endurance; but in spite of all that could be done the activity of the disease remained unchecked for one week. During this time the gumma of the iris increased in size until it pressed against the cornea; its apex became yellower and broader, and finally it became evident that it contained pus in its interior. Nothing that I could do afforded any relief; suffering was intense, and vision was practically useless; the tension of the globe was increased, and there was clearly pus in the eye which should be evacuated, and I decided to remove it by aspiration. The eye was cocainized, and a hypodermic needle was inserted through the cornea and into the center of the gumma or abscess. The piston of the syringe was drawn out, and an honest drop of pus followed it. This was followed by collapse of the walls of the sac from which the pus was evacuated. The syringe was withdrawn, the eye was bathed with hot water, atropia was instilled and a compress bandage applied. The immediate effect ot the operation was to intensify all of the former symptoms; but in a few hours marked relief was afforded, and when I saw him the next day the eye was clearer and in better condition than it had been under treatment. There was but little left of the gumma or abscess. In two weeks the eye was free from redness, and I directed him to continue the treatment for a week longer, and then to report to me.

He stopped all treatment and went to work again, but had to stop two weeks later, on account of the development of the same trouble in the left eye that he had experienced in the right one. He came again to me, and I found a well-developed case of syphilitic iritis. There were three distinct gummatous-looking formations projecting from the tissues of the iris into the anterior chamber, one near the lower margin of the pupil and one on the right and the left side respectively. Vision was much reduced in this eye (fingers at ten feet), while the sight had greatly improved in the eye which was first affected (20-100). The same line of treatment was adopted, and the disease behaved in much the same way, except that the outer and lower tumors of the iris went on to suppuration and spontaneous evacuation of their purulent contents into the anterior chamber. This occurred about a week after the eye became sore. All appearances of the abscesses which had ruptured soon passed away, and the remaining tumor, near the lower margin of the pupil, gradually disappeared by absorption. The pus was absorbed from the anterior chamber in a few days, and improvement went rapidly on. Three weeks later local treatmet was stopped, but the general treatment was continued, the *mixed treatment* being substituted for inunction. Vision at this time (March 28) 20-70 in the eye first affected, and 20-200 in the left or last affected eye. He was seen again on May 5, when his vision was found to be 20-28, or practically normal, in each eye.—*Memphis Journal of the Medical Sciences.*

ENTERO-MALARIAL FEVER.

The manifestations of malaria are truly protean. Every practitioner whom fate has settled in a malarious region knows how many shapes malarial infection assumes. Typical cases of malarial toxæmia are among the easiest to diagnosticate. Their characteristics are so marked that the unprofessional eye can easily recognize them. At the other end of the scale, where no distinct type can be made out, there seems to be no sharply defined boundary between the manifestations of malaria and those of other intoxications. The frequency of the coexistence of malaria with other morbific agents was long ago established; and it is very common to see in malarious localities the course of a disease influenced by an intercurrent malarial infection.

Perhaps the most important of these morbid combinations or mixed infections is the so-called typho-malarial fever. Under another name, *entero-malarial fever*, Dr. J. J. Kinyoun, bacteriologist of the Marine Hospital Service, describes the mixed diseases and the results obtained from a microscopical and bacteriological examination of the blood. (*Abstract of Sanitary Reports*, April 11, 1890.)

During the past year Dr. Kinyoun made a search in a number of cases of malarial and enteric fevers for the purpose of establishing the presence of the *plasmodium malariæ* in the blood, and of the bacillus of Eberth in the spleen or intestinal canal. His investigations were made on more than a hundred men, who all contracted the disease in one locality (Virginia). They were sailors or laborers who plied between New York and Richmond. In the majority of instances only enough water was taken aboard to last from New York to Richmond. In Virginia, the crew drank river water, or water from stagnant pools. This kind of water was also used on the return trip. It has been observed that malarial infection is more frequent on vessels that use stagnant water on their homeward trip; this would indicate that drinking water may be a prolific source of malarial infection.

Among the cases examined by Dr. Kinyoun were several cases of mixed infection, in which the malarial and typhoid germs were associated. These cases presented clinically deviations from the general course of either disease, according as the one or the other intoxication predominated.

Two cases were observed in which the malaria-symptoms predominated, and masked the enteric trouble. The disease began with chill, nausea, etc., and no suspicions of the coexistence of typhoid fever were aroused until the fourth or fifth day. On admission to the hospital the blood of the patients was examined for the malarial organism, the *plasmodium malariæ*. This was found in abundance, and the cases were put on appropriate treatment. In one case, three days after the chill, there was nothing abnormal on physical examination, except a slight tenderness in the epigastric region and a considerable enlargement of the spleen. The bowels were constipated. A microscopical examination of the blood was made and a large number of the *plasmodia malariæ* were found free, both in the serum and within the corpuscles. This established the diagnosis of malarial fever. On the fifth day after admission several suspicious-looking spots appeared on the abdomen; on the next day there was slight epistaxis, a tendency to diarrhœa and tenderness in the right iliac fossa. A bacteriological examination of the fæces was made, and after several trials a bacillus was isolated, which corresponded to the bacillus of Eberth. At the same time an examination of the blood showed that it still contained the plasmodium, though in diminished numbers and confined to the corpuscles. During the next week the enteric symptoms became so marked that a microscopical examination was not needed to establish the diagnosis of typhoid fever.

In the second case of this group the microscopical examination revealed the presence of the plasmodium in the blood; and, later on, the bacillus of Eberth was isolated from the fæces.

In a second group of cases the enteric symptoms were well marked. The patients had just returned from the South, where malaria was rife. As a matter of routine, the blood was examined for the parasite, which was found confined to the corpuscle, and not free in the serum. A bacteriological examination was made in each case, and the bacillus of enteric fever isolated, thus establishing the coexistence of both factors in the disease. In one case an exacerbation occurring during convalescence, was attributed to an indiscretion in diet; but another exacerbation occurred in twenty-four hours, and malaria was suspected as the cause. A fresh examination of the blood revealed the presence of the plasmodium. Antiperiodic treatment was resumed, and the case progressed favorably.

Dr. Kinyoun calls attention to his cases for the purpose of demonstrating that there is a combination of the two diseases, producing two distinct sets of symptoms, and that it is difficult, if not next to impossible, to demonstrate it without recourse to both microscopical and bacteriological examination, notwithstanding the statement made by an eminent scientist (Councilman) that enteric fever can be differentiated from malarial infection by examination of the blood. This class of cases, without doubt, gave rise to the fallacy that malarial fevers not infrequently terminate in typhoid, this opinion being held largely by the medical profession in malarial districts.

Kinyoun's observations on the blood of malarial fever were not attended with any difficulty. He usually drew the blood from the tip of the finger, and rarely found it necessary to draw blood from the spleen. In examining the fæces for the bacillus of Eberth, the failures were more numerous than the success, owing to the large number of both bacteria present.

Clinicians had claimed before the birth of bacteriology, the coexistence of malarial and typhoid intoxications. The article on "Typho-Malarial Fever," contributed to Pepper's "System of Medicine," by Dr. S. M. Bemiss, shows a clear conception of the independent relations of the two infections, and also describes a case strikingly similar to one mentioned by Kinyoun, namely, that in which exacerbations due to malaria occurred during convalescence. While the well-trained eye of the clinician can discern the phenomena arising from each infection, there is still a margin of uncertainty in the doubtful cases, due to the varying degrees of perfection attained by clinical observers. At the bedside, individual experience and acumen go a great way in deciding a diagnosis. A want has been felt; a something has been needed to enable the practitioner to determine in his own mind the nature of the infection with which he has to deal. The newest of sciences, bacteriology, comes to the aid of the practitioner and provides him with means of removing all doubt and making diagnosis a matter of positive demonstration.

In this connection we would like to give expression to a thought which was as difficult to keep down as the ghost of Macbeth's victim. In the Southern States there is no lack of malaria, and in Louisiana there is certainly more than we care to have. But with this abundant material for study right at our hands, where do we read that any investigator in our part of the world is trying to immortalize himself by discovering the true malarial germ? It is rather late now to enter the contest, for the *plasmodium malariæ* occupies the field, and examinations for this sprightly germ will shortly become as common in the hospitals and in private practice as examinations for the bacillus tuberculosis now are. The only Southern claimant to the discovery of malarial organisms in the blood is Dr. Joseph Jones, of this city; but he has not followed up his investigations, and the credit of establishing a direct causal relationship between certain organisms and malarial symptoms goes to Laveran.—*New Orleans Medical and Surgical Journal.*

PATHOGENIC MICRO-ORGANISMS CONTAINED IN THE MOUTHS OF HEALTHY INDIVIDUALS.

[Translated for this Bureau from *La Rivista Internazionale d'Igiene*, April, 1890.]

Vignal has observed more than twenty species of micro-organisms in the mouths of healthy individuals. Netter has conducted experiments directed solely to the pathogenic micro-organisms existing in the mouth which may determine affections in other organs. These pathogenic agents are the pneumococcus, the streptococcus pyogenes, the capsule bacillus of Friedländer, and the staphylococcus pyogenes.

The pneumococcus exists in the mouth of the healthy individual in at least 20 cases out of 100, the streptococcus in 5.5, the capsule bacillus in 4.5. These figures are probably lower than the actual proportion. Netter's results from saliva inoculations were sometimes positive, sometimes negative. The reason for this may be that the saliva did not contain pathogenic micro-organisms in sufficient quantity at a given moment of inoculation.

The pneumococcus is the pathogenic agent of pneumonitis, and also determines other affections. Netter has verified its presence in 14 cases out of 43 of broncho-pneumonia, in 19 cases out of 54 of purulent pleuritis, in 26 cases out of 62 of otitis media, in 16 cases out of 25 of suppurative meningitis, and in 14 cases out of 37 of ulcerous endocarditis.

The streptococcus pyogenes is frequently found in visceral suppuration, in purulent arthritis, and in pyæmia; its identity with the streptococcus of erysipelas has been verified. Netter has observed the streptococcus 20 times in 43 cases of broncho-pneumonitis, 27 times in 54 of purulent pneumonitis, 32 times in 62 of otitis media. Never observed it in a case of ulcerous endocarditis, 6 times in 6 of acute cervical adenitis, 4 times in 4 of suppurative arthritis.

The pneumo-bacillus of Friedländer is found in broncho-pneumonitis and otitis media. Netter observed it in a case of ulcerous endocarditis, in 1 of purulent pleuritis, and 1 of cerebro-spinal meningitis.

The mouth is indisputably the point of departure of pathogenic agents.

The modus of the introduction of these agents is to be considered in connection with the position and function of the mouth. Once established in the bucco-pharyngeal cavity, the germs find a soil favorable to their development, thanks to temperature and the alkaline reaction of the saliva. They may remain indefinitely in the mouth and morbid phenomena fail to appear. The preventing cause is the integrity of the membrane which lines the mouth, the pharynx and the cavity with which the pharynx is connected. Gamaleia has demonstrated that a culture of pneumococcus may be injected into the trachea of a ram without determining pneumonitis. The pneumococci are absorbed and digested by the cells of the trachea and the bronches. When these cells are destroyed the development of pneumonitis follows on inoculation.

When the integrity of the membranous lining of the bucco-pharyngeal cavity is impaired in consequence of wounds, cold, or vaso-motor disturbances, the development of the disease due to the particular micro-organism ensues.

Hence the frequency of some diseases and the gravity of others is diminished when the pathogenic micro-organisms of the mouth are destroyed, or when they remain innocuous.—*Abstract Sanitary Reports.*

EDITORIAL.

THE NORTH CAROLINA MEDICAL JOURNAL.

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Thomas F. Wood, M. D., Wilmington, N. C., } Editors.
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EDITORIAL CORRESPONDENCE—PHARMACOPŒIAL CONVENTION OF 1890.

The lack of interest in the United States Pharmacopœia is one of the unaccountable things in the history of the medical and pharmacal professions of our country. Until 1880 the work was in the hands of very few persons, all because of apathy and indifference of the masses of the professions, as though the standards for the medicines for the sick, and the processes for the pharmacist, and the doctor who is his own druggist—the latter a very large number of the medical profession in the Southern and Western States—were nothing to him, and that he had nothing to do but to receive the work of somebody, he cared not who, as authoritative, apparently willing to wait to learn what the authors of the dispensatories had to say about the whole matter. It is a strange thing to put upon paper, but it is true, there are doctors and druggists in this broad land of ours who have never seen a Pharmacopœia of the United States, knowing absolutely nothing about the work further than that it is quoted in the dispensatories. In view of this state of affairs our friends who work so diligently to keep right up in the front line of the advances in pharmacy and chemistry, need not feel disappointed at the apathy evidenced by the small delegation from the South, for they can see plainly that this is going to be a thing of the past.

The meeting at Washington on the 7th May was preceded by a meeting of the Committee of Revision of 1880, at the Arlington Hotel. There had been only two deaths out of the twenty-five original names, and those present were as follows :

Robert Amory, M.D., Boston; Dr. Charles Rice, New York; Prof. P. W. Bedford, New York; F. A. Castle, M.D., New York; Prof. C. Lewis Diehl, Louisville, Ky.; Louis Dohme, Ph.G., Balt.; Thomas Doliber, Ph.G., Boston; Prof. Laurence Johnson, M.D., New York; Prof. J. M. Maisch, Philadelphia; Prof. G. F. M. Markoe, Ph.S., Boston; Prof. Oscar Oldberg, Phar.D., Chicago; Dr. D. Webster Prentiss, Washington, D. C.; Prof. Albert B. Prescott, M.D., Ann Arbor; Prof. Joseph P. Remington, Ph.M., Philadelphia; W. S. W. Ruschenberger, M.D., Philadelphia; A. B. Taylor, A.M., Philadelphia; Mr. W. S. Thompson, Washington, D. C.; Prof. O. A. Wall, Ph.G., M.D., St. Louis, and Thomas F. Wood, Wilmington, N. C.

Upon this old Committee devolved the duty of rendering account of the work of the past decennium, and laying down the general principles for the guidance of the new Committee of 1890. A review of the enormous mass of work, especially that devolving upon Dr. Charles Rice, can only be estimated by looking at the monster book of records which was exhibited to the Convention. The final work of this Committee, afterwards spoken of by Dr. Horatio C. Wood as "hammered and polished work," the directions to their successors, after a discussion lasting over two days, was finally accepted by the general Convention almost literally. No severer test could have been applied than the one the report received, and that it should have been adopted will be more surprising when the nature of the propositions are considered, as stated hereafter.

It was highly gratifying to meet old friends who for ten years had worked together so harmoniously, and to note how leniently time had dealt with them. The silvering of the hair of most of them did not indicate any diminution of interest in their work, but rather a zeal heightened by the experience of ten years. When we consider that the United States is the only country that prepares its Pharmacopœia at the expense and solely by the labors of the pharmacists and doctors, and that this work, involving especial skill, is done by men whose services are in demand in their several callings, it reflects great credit upon the combined professions who compose the Convention and the Committee of Revision. While Congress is bestowing immense sums on questionable matters, it is as little as that body could do to vote a few thousand dollars to a work which the Government adopts as the official standard for all the departments. If such a bestowal of money would at all hamper the free course of the work, it would be promptly rejected by the Convention, at least so we infer from the action taken by Mr. Rice in the Washington Convention.

The Pharmacopœial Convention organized on 7th May at the Law School of the Columbian University 14th and F streets, Dr. Robert Amory, of Boston, in the chair. Owing to very imperfect machinery, the Committee on Credentials made a report, incomplete and unsatisfactory, which had to be amended many times, thus consuming much precious time, and putting some delegations to great trouble and annoyance. The arrangements for 1900 will be more complete.

The delegations from the South were not large, and were characterized by the absence of physicians, North Carolina and Virginia together sending only four between them.

The chief business of the first session was hearing the report of the Committee of 1880, read by Prof. Bedford. The recital of the work of the Committee, bravely beginning without a cent from the Committee of 1870, borrowing a few hundred dollars to inaugurate the business, finally bringing their work to completion and turning over to the new Committee $2,500—after paying all expenses. Could our readers imagine a committee of Congress, for instance, starting out without pay, and pledging their individual credit to carry on a work that would bring no money into their pockets !

The report upon which was centred the chief interest of the session was the one entitled "*Draft of the General Principles which are to Guide the next Committee of Revision.*" Much has been said and written by pharmacists, manufacturing chemists, and now and then a doctor, on the standardization of drugs—that is to say, a theory has been set forth that preparations such as tinctures, extracts and so on should be so prepared that there should be a constant proportion of the active principle. The moment this question was raised in the report of the Committee it was plain that there was going to be some heated debate on the subject among the pharmacists, and that the doctors would be mere lookers-on and listeners. The weight of the argument was that generally assays of crude drugs were impracticable, and if practicable were seldom of more use in determining the goodness of a drug than the minute knowledge of identity from appearances, to the skilled eye. That it was not at all settled in pharmaceutical chemistry that the alkaloidal or other isolable principle which gave character to some drugs was the essential ingredient, and that it might be rich in a separable alleged active principle and be deficient in some other really essential ingredients, and so fall below the standard. Some of the speakers went so far as to say that in such well-known drugs as fluid extract of ergot and others, that no chemist was able to say in what thing the active element resided, and that drug assay and standardization was an ideal matter, beyond the present range of chemistry. The Convention adopted the principle as laid down by the Committee of 1890.

"*Assays for Drugs.* It is recommended that assay processes be appended to the descriptions of the more energetic or otherwise important drugs containing active principles, provided the therapeutic value of the drug depends upon the amount of these principles, and, provided, also, that these principles can be assayed and identified with reasonable accuracy, and without requiring complicated processes. The Committee may attach a note stating the average percentage of these active principles in good commercial samples of the drug, and, if it be found feasible, it may attach a requirement that the drug shall not be used unless it conforms to these limits."

"*Assay Processes for Galenical Preparations.* The Committee may attach assay processes to such galenical preparations as fluid extracts, tinctures, etc., but it shall omit requirements of a definite strength of active principles except in case of drugs for which an upper or a lower limit, or both, of active principles is prescribed.' As to the assay of opium and cinchona, the only drugs required to be so treated, those processes were recommended which would produce the greatest proportion of the active principle.

A proper consideration of these subjects will show how wisely and conservatively the Committee acted; and it was upon these three divisions of the subject popularly known as standardization, that the Convention returned, after protracted debate, interlineating, eliding, altering in various ways, to almost the original language of the Committee.

Passing over the other eleven articles, as they may not interest our readers particularly, we come to proposition 7 of the Committee upon the admission of *Proprietary or Patented Articles.* Since the last revision many be very useful chemical substances, such as antipyrine, antifebrine, exalgine, sulfonal, etc., etc., have been added to our list of drugs, and it is a serious matter what we ought to do about them. After long consideration the Committee's utterances on this subject is as follows:

"No substance which cannot be produced otherwise than under a patented process, or which is protected by proprietary rights, shall be introduced into the Pharmacopœia." It may not be remembered by all of our readers that salicylic acid and chloroform are now made by patent processes, which give a much cheaper drug than by the old processes. These products are legitimately bought and sold and can be admitted into the Pharmacopœia because they can also be made by other than patented processes, and so when antipyrine and other things can be made by some new chemical process not patented, they may be introduced, but they must bear some other name to designate them, as the trade-mark name "antipyrine," etc., is perpetually protected by all the governments. This writer hopes that it may be discovered at no distant day that the exact chemical constitution of many of these new chemicals do aid new processes, so that they may be admitted to the Pharmacopœia, as many of them have come to stay. In the meantime he conceives it to be our duty, in every instance where it is best for the patient, to select such articles as are known only by their chemical name. Very much is yet to be done about these new chemicals, and it will take all the wisdom of the profession to settle the question. If physicians all over the country would take the difficult questions under consideration, and help the Committee, the pharmacists could be relied upon to aid us in placing these chemicals where they belong, either inside or outside of the Pharmacopœia. The greed for many in the manufacture of these articles is hard to circumvent, but it must be, and the monopolists made to feel the forse of the disapproval of the two profestions of their course.

Afternoon of the first day's session a committee on nominations was formed of one member of each of the delegations, numbering in all about one hundred. This body met at the Arlington, continuing their work until 2 o'clock in the morning, with the following results:

President of the Convention of 1890, Prof. H. C. Wood, M.D., LL.D., President; Vice-Presidents, Mr. W. S. Thompson and D. W. Prentiss, M.D., of Washington; J. M. Flint, Surgeon U. S. N.; A. E. Ebert, of Chicago, and J. W. M. Searcy, of San Francisco; Secretary, Dr. H. A. Hare, of Philadelphia, and Dr. G. H. C. Klie, of Louisville, Assistant Secretary.

The following twenty-five names were announced as the Committee on Revision and Publication:

Charles Rice, Ph.D., New York; Prof. J. P. Remington, Philadelphia; Prof. F. B. Power, Wisconsin; Prof. P. W. Bedford, New York; Dr. W. M. Mew, U. S. A.; Dr. John Godfrey, U. S. M. H. S.; Dr. J. M. Flint, U. S. N.; Prof. J. M. Maisch, Philadelphia; Dr. Roberts Bartholow, Philadelphia; Dr. C. O. Curtman, St. Louis; Dr. F. A. Castle, New York; Dr. N. S. Davis, Jr., Chicago; Prof. C. L. Diehl, Louisville, Ky.; Dr. R. G. Eccles, Brooklyn, N. Y.; Dr. W. G. Gregory, Buffalo, N. Y.; C. Mohr, Ph.D., Mobile, Ala.; Prof. G. F. H. Markoe, Boston; Prof. Oscar Oldberg, Chicago; Prof. L. E. Sayre, Kansas; Prof. Otto A. Wall, St. Louis; Dr. Thomas F. Wood, Wilmington, N. C.; Dr. H. H. Rusby, New York; A. B. Taylor, Philadelphia; Dr. R. T. Edes, Washington, D. C.; Prof. C. S. N. Hallburg, Chicago.

The adoption of the standard of weights and measure adopted by the Convention, as recommended by the Committee is, "solids to be weighed, liquids to be measured, and that the metric system be adopted for this purpose," was an inevitable action. This does not affect the medical profession in any way except to secure a more uniform system in the preparation of drugs. We are well aware that the physicians of our section of the country are as far from the metric system in writing prescriptions as ever, but the action of the Pharmacopœia does not at all commit them to the metric system. We doubt if the Southern druggists are prepared for this change, but they had as well be preparing, as it must come in a few years. An outlay for weights and measures in the system is not great, and we trust they will set about a consideration of its importance without any serious opposition.

The social features of the occasion were such as our Washington friends are always able to excel in, but especially we enjoyed the Mt. Vernon excursion, and during the sail down the river and back we enjoyed not only pleasant intercourse with old and new friends, but we saw the new torpedo boats on trial. The excursionists were quite excited to see these little midgets circle round and round the large excursion steamer, gyrating round in the river like ducks.

The pleasure of the meeting has come and gone, now for work, and let us have a better Pharmacopœia than ever, one that will be useful and popular among the medical profession, one that will succeed in drawing closer together the working men of both professions.

T. F. W.

CHLORAL HYDRATE FOR CARCINOMA OF THE CERVIX.—This is both a narcotic and disinfectant. It will be found useful as a local application in carcinoma of the cervix. Sixty grains of chloral are dissolved in an ounce of glycerine. A tampon saturated with this is placed against the cervix and reinforced by a dry plug. These are retained from twelve to twenty-four hours. The strength of the solution may be increased as the pain indicates. The advantage of this application over the morphine suppositories commonly employed is the absence of disagreeable after-effects and constipation caused by the latter.—*Archives of Gynœcology.*

REVIEWS AND BOOK NOTICES.

Diseases of Women and Abdominal Surgery. By Lawson Tait, F.R.C.S., Edin. Philadelphia: Lea Brothers & Co., 1889. Vol. I.

We are willing to acknowledge that anything from the pen of so rare a surgeon as the author of this book has proven himself to be, disarms all criticism. Egotism is a fault that we don't like to tolerate usually, but there is a freshness and raciness about him that only enhances the interest in all he writes. If he has appeared before the medical world as a boaster, he has made good more than he said, and so we come to the perusal of the volume convinced of its merits in advance.

The introductory remarks on the anatomy of the abdominal organs opens the old question of the relations of the abdominal and pelvic organs. The first illustration is that of a frozen section of the pelvis of a new-born child, which gives the uterus in the position of marked anteversion.

The organs treated in this volume are, mons veneris, vulva, vagina, urethra, bladder, uterus, broad ligament and mesentery, Fallopian tubes, ovaries, pelvic bones, liver and gall-bladder, kidneys, spleen and pancreas, colon, rectum, cæcum and small intestines and breast.

To the sixth chapter, on the Anatomy and Physiology of the Ovary, will attract most attention inasmuch as all of this wonderful series of surgical operations, which of late years have revolutionized our old standards, have grown out of our knowledge of ovariotomy. To this the author devotes 55 pages. To the next chapter, too, on the Fallopian tube and menstruation, great interest will attach, on account of the author's independent treatment of the subject.

He gives large space to the investigation of Dr. Arthur W. Johnston, of Danville, Ky., expressing himself satisfied as "effectual in the explanation of the physiology of menstruation, as it is capable of adaptation to the pathology of the uterus and its appendages."

Writing of the inflammatory disease of the uterine appendages, the author says some plain things: "We come now to speak of changes effected in the uterine annexa by a distinctly inflammatory process. I ought here, of course, to discuss and advocate some theory of inflammation—at least to attack and abuse some one else's theory, if I cannot support one of my own. But I shall do nothing of the kind, for, so far as I have seen, every theory of inflammation is like the dog in Hamlet's speech—it will have its day. The present fashionable theory is that everything has its origin from microbes, and these are twisted about to explain the inexplicable. I shall have more to say on the subject by and by; merely let me say now that in my short time I have learnt (and have unlearnt) six different theories of inflammation. Every one of them has been as violently supported as the microbe theory, and five of them have gone the way the microbe theory is going. We know enormous numbers of valuable facts about the inflammatory process, but a satisfactory theory of it we have not." A most insubordinate pathologist we have here, and when he gets through with microbists on pages 372 and 373, they are sturdy partisans if they are not then ready to at least re-investigate their theories.

All through these pages we have the most valuable pathological and physiological teaching, which must set the world to thinking over our old positions. Everywhere we have the personal impress of an independent investigator, so independent, indeed, that he is worthy to be an American, and he may have every assurance that he may write as many books as he likes, he will always find numerous readers on this side of the Atlantic. We shall await Volume II with impatience, and in the meantime, all of our readers will order the present volume.

A New Medical Dictionary: Including all the words and phrases used in Medicine, with their proper pronunciation and definitions. By George M. Gould, B.A., M.D. Philadelphia: P. Blakiston Son & Co., 1012 Walnut Street. 1890. Pp. 518.

The American profession is peculiarly fortunate in having their choice of medical dictionaries by their own countrymen. The volume under consideration is compact and handy, well suited by its size to the use ot the medical student, and also to his usually depleted pocket. There is no test of a dictionary so good as that of actual use in the library, and so far we have found this one to satisfy the ordinary needs of those for whom it is designed.

We have noted some minor errors which the author might care to notice, as follows (giving the correct word): On page 46, right hand column, twelfth line, *Ampelopsis; Sapientum*, page 75, 26th line from bottom; page 103, right hand column, 3d line from bottom, *Ambrosioides;* page 107, right hand column, 11th line from bottom, *Chrysarobin*, or *Chrysarobinum;* page 382, 6th line from bottom, left hand column, *Purshiana.* The test given as "Trommer's," on page 445, is not Trommer's test at all. *Trumpet Plant*, on page 445, is made synonymous with "*Venus Fly-catcher*," an entirely different plant.

The author has adopted the fashionable, but unwarrantable, pronunciation of Mic-roblast, Mic-rocytes, Mic-roscope, but for the most part his pronunciation is conservative.

The best work done by the author is in eliminating obsolete words, but we think he might have retained such as Eupepsy, etc., and he might have recognized some well established words, such as *Vaccinifer*, and some of the German terms now so necessary to correct understanding of chemical processes especially.

The printing and binding of this volume are good and serviceable, and successive editions will doubtless make it more and more accurate.

SPINAL CONCUSSION: Surgically considered as a cause of spinal injury, and neurologically restricted to a certain symptom group, for which is suggested the designation ERICHSEN'S DISEASE, as one form of the Traumatic Neuroses. By S. V. Clevenger, M.D. Philadelphia: F. A. Davis, 1889.

The thesis of this volume is pretty fully given on the title page. Spinal concussion from railroad accident is a very perplexing thing to honest physicians, as it has been very often used as a wedge to enter the treasury of railroad companies, and is very largely a mythical disease as professed by claimants. It is a question that will sooner or later puzzle the brains of those living along the line of railroads, and the anxious enquirer will find this treatise useful and helpful. Individual opinions, backed by ample experience, we would prefer, but these cannot be much out of the way in a book that follows so closely the original work of Erichsen.

A TEXT-BOOK ON DISEASES OF THE EYE. By Henry D. Noyes, A.M., M.D. New York: William Wood & Co., 1890. Pp. 730.

This large volume, the author says, is the outgrowth of his treatise on diseases of the eye which appeared in Wood's Library in 1881. In all respects, though, it is a new book, and the author has spared no pains to make it acceptable to the general practitioner, while the specialist cannot fail to find it equal to his necessities.

The illustrations are numerous, in wood-engravings and chromolithographs, many of them being original, a feature in a special treatise which always enhances its value in the estimation of the general practitioner.

This volume, written from the fullness of a large experience, will maintain an honored position with the many excellent volumes we have so recently noticed in the JOURNAL.

MONTHLY NURSING. By A. Worcester, A.M., M.D. Second Edition. D. Appleton & Co., 1890.

This is a very good little manual, worthy to be placed in the hands of every monthly nurse. It is beautifully printed, the language is simple and concise, the tone of the whole work is wholesome and safe. The nurse who follows its guidance will not be officious, and so commend herself to her employers.

FRANCIS KINLOCH HUGER.—We noted in our last JOURNAL that a gentleman of the above name, accredited to North Carolina, was a student in John Hunter's household. To a kinsman of Dr. Huger in Charleston we are indebted for the following items: "Francis Kinloch Huger was a private pupil of John Hunter and lived in his family, and he related this fact to his kinsman—that he breakfasted with Mr. Hunter, and the same day made a post-mortem examination, taking out his heart, he (Mr. Hunter) believing that he had a disease of his heart, ordered that this examination should be made in the event of his sudden death, and he died suddenly while making the rounds in his hospital. Dr. Huger left London and went to Austria with one Dr. Bollman, attempted the rescue of La Fayette from the prison of Olmutz. Huger was captured, tried and sentenced to death and was confined in a dungeon for months. He was, one morning, liberated and told to get out of the country as fast as possible, which he lost no time in doing. On returning to the United States he received a commission of Colonel in the army and served in the war of 1812. He died in Charleston in 1855, and is buried in Magnolia Cemetery."

CORRESPONDENCE.

TWO CASES OF LABOR—A LIVING AND DEAD FŒTUS, HARE-LIP AND FISSURE OF PALATE—CYSTITIS IN FEMALE TREATED BY DILATATION OF URETHRA—STERILITY FROM DYSMENORRHŒA, GOELET'S METHOD; RECOVERY—CIRCUMCISION.

Snow Hill, N. C., May 8, 1890.

Messrs. Editors North Carolina Medical Journal:

Early one morning of July of last year, I was called to atted a case of labor four miles in the country. During my first examination I found the exteanal os dilated to the circumference of five or six inches, bag of waters intact, and just within was a more than semi-hard mass that felt, at first, like some foreign substance. Beyond this, nearly as high as my finger could reach, was the head of a child presenting in the first position. What the foreign body was rather puzzled me for the moment, and put me to thinking. I waited twenty or thirty minutes and examined again, when my fingers (index and middle) came in contact with bone. As the contractions came on, my finger being upon the presenting parts, pressed over the sagittal suture which overlapped from the force of the pains. I was sure then that I had to deal with two babies instead of one—a minnow and a whale, so to speak. The other head appeared natural to the touch and like a child at full term; while this one felt peculiar, very peculiar; not like a live fœtus, nor yet like a dead one ordinarily, but like something between the two; or, rather, as though it had been saturated in alcohol and glycerine. Soon the funis of the little child came down and it was quite small and coral-like, having no pulsation, and, therefore, I was certain this child was dead. I was curious to see exactly how large it was and what it resembled. Some half hour after this, being an hour and a half after my arrival, the small baby was delivered, showing no signs of animation. Cord tied but once, maternal end did not bleed. The child was partly mummified (in my hurry can't think of a better descriptive word), and looked somewhat as though it had been steeped in alcohol. It presented the appearance of a fœtus advanced to four months. About that length of time, for some inexplicable reason, it must have died, and, being excluded from the air, remained in a good state of preservation.

The second child came down naturally and soon announced itself by a piping tenor. This was a fine, vigorous baby—a girl, if I recollect correctly—the other one was a boy. The placenta was quite large, near the border of which was attached the small cord, while the large one was given off near its center. Have recently seen two or three analogous cases reported in different journals.

On the 21st of last October I attended a lady in labor suffering from impacted head. Under chloroform, womb and soft parts being dilated, applied forceps without trouble, and delivered a male child which proved to have an ugly hare-lip (single) running obliquely up to ala of nose, right side, with cleft palate involving the whole of the superior maxillary bone, division being wide enough to admit my little finger. Advised operation for hare-lip at once. This was performed on the fourth day after birth under chloroform, with no one to assist but two women and my waiting boy. Performed usual operation, which resulted successfully. Doubtless you remember the great difficulty the incomparable Sayre had in securing aid in his first subject of hare-lip. Our own accomplished Warren experienced similar trouble in his hernia case in Egypt. But down in Old North Carolina we (sometimes) have to take the bull by the horns and do our own work.

I visited Marlboro, ten miles distant, November 1st, and operated, by More Madden's plan, upon the female urethra for chronic and inveterate cystitis. This case had stood for eighteen consecutive months, and she was under the care of one of the most learned physicians in Eastern Carolina. He tried about every known remedy without operating. The lady's life was a constant burden to her. Pain was frequent and severe; the urine was voided every fifteen minutes night and day, being bloody in character, and the effort produced excruciating agony. She fell off to a mere skeleton. This was such an ugly case that I was compelled to stretch the urethra, using a bivalve instrument, four different times, at intervals eight days apart. I stretched slowly, but freely, until I could insert my forefinger with little or no trouble. Each dilatation consumed twenty or twenty-five minutes. After stretching, glycerite of carbolic acid was applied to bladder upon a common country broomstraw wrapped with cotton. I nick the end of the straw hastily with a pocket-knife and then apply the cotton to it, twisting the straw to make the cotton adhere well. I use these straws very frequently to apply medicine to the womb internally or externally, and they answer the purpose of a more costly instrument; besides, I have no fear of spreading disease with them, as they are thrown away after use. With this lady I gave boric acid internally in 15-grain doses three times a day for several days after each operation. She was kept quiet upon her back as much as possible during treatment. After bladder was relieved sufficiently to allow going nearly all night without voiding urine, I used Grailey Hewett's anteflexion pessary, flexion, with other causes, having produced the cystitis. Case getting on splendidly. Have operated five or six times since then with happiest results. Have used Goelet's method for dysmenorrhœa and sterility several times and am highly pleased with it. A young couple had been married two years without issue. I operated; one menstruation followed, and the only thing I regret about the whole business is, it will come off about the time our Society meets, and I am afraid I can't attend; that will be too bad. In my cases I dispensed with Goelet's tenaculum, forceps and dilator. I used Natt's dilator which I had. After stretching womb I strung instrument No. 10, 12 or 14, whichever I wished to use (usually used smallest one first), on the wire—a suitable wire—and just let the end of the wire dip into the mouth of womb for half inch, and then with my finger or any convenient blunt instrument, pushed the dilators in place, withdrawing the wire at the same time. The wire of a gum catheter, made a little blunt at the end, does first-rate. It would be better to have Goelet's instruments complete, but a poor country doctor is compelled to resort to many expedients.

The last week in April I performed circumcision upon a young man sixteen years old for congenital phimosis. Dr. E. H. Sugg assisted me. While I do a good deal of operating, this is the first case of the kind that I have had. The lad is now well and rejoicing.

I was with a lady in cofinement a few days ago who gave birth to a child, perfect and hearty, whose navel cord measured 3 feet 4 inches. Girls are always phenomenal, and this is a girl, which I measured most accurately with a wooden yard-stick.

Respectfully yours, W. C. Galloway.

SOMETHING MORE ABOUT POTASSII NITRAS IN INTERMITTENT FEVER.

New Orleans, May 12, 1890.

Messrs. Editors North Carolina Medical Journal:

To answer fully and specifically the great number of communications received from physicians throughout the country, asking additional information relative to the use of *Potassii Nitras* in malarial affections, would necessitate the occupation of the greatest part of my time. I will say, in brief, that I have treated more than two hundred cases of chronic chills of malarial origin, from a few months to years standing; many complicated with enlargement of the liver and spleen, dropsy, jaundice, etc., all more or less emaciated and anemic. Nearly every case was cured with a single dose of *Potassii Nitras.* From 2 to 15 grains of the salt, according to age, dissolved in a half ounce of water, administered just prior to the chill or during its continuance, did not only abort or arrest the chill, but effectually prevented its recurrence. In order to test the value of the remedy, I employed no subsequent treatment, but left the restoration to health (which was in nearly every instance rapid and satisfactory) to the *vis medicatrix naturæ.*

I am fully assured that from 2 to 15 grains of *Potassii Nitras* will usually abort or arrest a chill arising from any cause. A large dose is not well borne by the stomach, and frequently, in my hands, caused most alarming and distressful symptoms, by producing a prolonged depression of the heart's action.

I am, most respectfully,

J. D. Hunter, M.D.

352 Tulane Ave.

Penicillium and Corrosive Sublimate.—J. M. Coulter notes the fact that he found a rank growth of *Penicillium glaucum* (crustaceous mould) upon a mass of flour paste strongly impregnated with corrosive sublimate.

BUFFALO LITHIA SPRINGS (VA.) WATER.

ITS USES AFTER SURGICAL OPERATIONS, ETC.

[Reprint from Editorial in April number (1890) of the *Virginia Medical Monthly.*]

Hunter McGuire, M.D., LL.D., etc., formerly Professor of Surgery in the Medical College of Virginia, Ex-President of the Southern Surgical and Gynæcological Association, etc., in a recent conversation with us on the subject of Mineral Springs Waters made special mention of the use of Buffalo Lithia Water after cases of laparotomy and other surgical operations. Feeling assured that his views on this subject would be of interest to the Profession generally, we requested a statement of his opinion, and obtained his permission to quote him as follows:

"RICHMOND, VA., March 24, 1890.

"*Dear Dr. Edwards:*—I have just received your letter of this date. I use Buffalo Lithia Water very freely in my Hospital. After every case of laparotomy I give this water for its diuretic properties, and because the stomach bears it so well—often retaining it when everything is rejected. Indeed, I use it freely after nearly all my surgical operations. It is especially valuable in supra-pubic cystotomy. Many years' experience in its use only confirms the good opinion I have so often expressed in regard to it.

"Yours very truly,

"HUNTER McGUIRE."

WHAT DISPOSITION SHOULD BE MADE OF A CERTAIN CLASS OF OUR CRIMINAL INSANE?

Messrs. Editors North Carolina Medical Journal:

GENTLEMEN:—In my last Annual Report of the officers of this Institution I took occasion to make to my Board of Directors two suggestions which I deemed matters of general interest to the people of the State. One of these suggestions had relation to the maintenance of a certain class of our insane—the homeless incurables—by the counties, and insisting that suitable provision should be made for their comfort and safety. This suggestion was made upon the hypothesis that the State would not provide for all classes of the insane by enlarging the hospitals now in operation. My other suggestion was "that when a party is arrainged for murder and the plea of insanity is made in extenuation of the crime, and *when there is any doubt as to his mental condition*, legal proceedings should be arrested and such party should be committed to an insane asylum for observation." The above is my proposition, and is based upon the broad assumption that physicians who are summoned to testify in such cases, as a rule, do not have at the time nor have they had sufficient time nor opportunity for observation in order to express a reliable opinion in a question involving the life or death of a fellow-man. In the JOURNAL of April you saw proper to notice these suggestions, and to copy an adverse criticism by the editor of the *Statesville Landmark* on my suggestions relating to the alleged criminal insane. When I wrote these suggestions I expected they would be criticised, and I am glad the editor of the *Landmark* took sufficient interest in the matter to discuss it in his paper; and I hope these questions will be freely discussed at the approaching session of our State Medical Society at Oxford. These suggestions are the opinions of one man, seeking light and anxious to know the truth, and claiming no infallibility of judgment. With your permission I will reply to the criticisms of the *Landmark* which may also be the criticisms of many other sensible men; and that your readers may understand the question at issue, having stated my proposition, and will also state his, which is as follows: "Any intelligent physician, with good opportunity for observation, ought to be able to tell when a person is feigning insanity in a jail as well as out of one." If the editor of the

Landmark knew as much about insanity as the Superintendent of the Asylum of which he (the editor) is a Director, I do not think he would have written such a statement. In the first place the "good opportunity for observation" cannot be had in jail unless one be incarcerated with the prisoner to play the detective; for in many cases the true mental condition can be ascertained only after frequent, close and prolonged contact, and such conditions are furnished alone in asylums and to those who have daily intercourse with the patients. Another statement of the *Landmark:* "The asylum physician who is conscientiously working for the good of his patients is unfit for the detective duty that such a law would impose on him" *Per contra,* I will state that the "asylum physician who is conscientiously working for the good of his patients" must of necessity, by his every day contact and study of his patients, come in possession of a knowledge of his patients that is "detective" in its completeness. It seems to me that it requires but a limited knowledge of hospital life to convince any doubting Thomas that there are many means of information and opportunities to detect the malingerer enjoyed by the hospital doctor, that no one else can have, and the statement that any intelligent physician can detect feigned insanity in a jail as well as out of jail, is, I must believe, a hasty judgment, resulting from a crude digestion of the subject. I will here reiterate the statement contained in my suggestion: that any man of good average intelligence who is accused of murder can feign insanity with sufficient success to cloud the mind of expert witness and jury as to his mental status, and it is becoming a popular dodge, and the history of our courts is recorded evidence that the dodge is often successful. But not only should the dissimulation of the malingerer be detected, but the irresponsibility of the mentally diseased should be clearly demonstrated. Time would fail and space would be forbidden were I to enter at length into a discussion of the manifold forms and phases of insanity, showing how necessary is time, daily contact and a most intimate acquaintance to appreciate the moral responsibility of many of our unfortunate fellow-creatures. Another objection of the *Landmark:* "Nor has he (the hospital doctor) time to leave his work and dance attendance at the courts for an indefinite period." The hospital doctor is in the employ of the State, and the State has a right to his services, not only in the hospitals, but as an expert in courts when necessary to further the ends of justice by furnishing intelligent and reliable testimonry as to the responsibility or irresponsibility of the class under consideration.

We have three Insane Asylums in our State and eight hospital doctors, each one of whom would be a reliable witness in such cases, and as such cases as we are now considering are few, and days are set for their trial, the time lost would be inappreciable to each hospital, and the duties of the "dancing attendance at court" could without embarrassment be performed by the remaining doctors. While I am clearly of the opinion that an expert, trained in the examination of the insane, is the most competent person to pass upon the character of the alleged insane, I presume it is hardly necessary that I should here, both for myself and for my brethren of insane asylums, disclaim any and all desire to "dance attendance at our courts." Such a duty, I am sure, would be distasteful and impose delicate and irresponsible duties that would rather not be assumed.

I fully agree with the *Landmark* in all he says in the way of objections to mixing the criminal and the alleged criminal with other classes of our insane population in hospitals. This, however, is being done now in every asylum in our State, and the addition of the small class in question would not materially add to the trouble now existing. But my suggestion is that this class be committed *to an Insane Asylum.* Of course a criminal Insane Asylum is the kind of an asylum for such a class, and every State should have one. On this question there will be no diversity of opinion among those who have experience in the care of the insane. But in the absence of such an hospital my suggestion contemplates their commitment to such asylums as we have as the next best thing that can be done. Let us now look at the *Landmark's* suggestion : "That the State provide for its criminal insane at the State Penitentiary and so forever rid the asylums of this burdensome class; then there would be less feigning and less need for expert testimony." As above stated, I heartily agree with him as to the desirableness and even necessity of an hospital for our criminal and alleged criminal insane; but I am not sure that at the Stafe Penitentiary is the best place for it. But what about *the conclusion* of the whole matter, as drawn by the *Landmark?* "*Then there would be less feigning and less need for expert testimony.*" A great man has said that every man comes into the world asking *why?* I would like to ask *why* would the erection of a hospital for the class under consideration *prevent, or even diminish,* the number of malingerers? The Penitentiary does not prevent many men from stealing, though it may diminish crime; but neither the Penitentiary, nor jail, nor dungeon, much less a criminal insane asylum, would, in my humble judgment, *prevent one man* from feigning insanity in order to save his neck from the halter. I have looked at the *Landmark's* conclusion closely and have studied the question patiently, but I am still wondering how, by what process of reasoning he ever reached such a conclusion from the premises laid down. Does the suggestion carry with it implied cruelty? Must I conclude that the criminal and alleged criminal insane's environments at the Penitentiary are to be so revolting to even depraved humanity, his treatment so cruel that the malingerer would rather pay the penalty of his crime upon the gallows than suffer the slow, torturing process of dying in the insane cells of the Penitentiary? The known good sense and humane feelings of the *Landmark's* editor forbid such an inference; and the Christian character of Col. Hicks gives assurance that even the criminal insane as well as the alleged criminal insane committed to his care-keeping would receive humane treatment. What, then, does the *Landmark* mean? I confess I cannot tell. I will state in this connection that many of the so-called criminal insane demand as kind treatment and as thoughtful consideration as other insane. Many such led as pure lives as the best of our citizens, but, dominated by an irresistable impulse or a strong delusion, they have shed innocent blood, and are not morally or legally responsible for these acts. What shall we do with this class—confine them in a penitentiary? Surely not. For all such and for the class more particularly considered let us have a special Asylum—not at the Penitentiary—but under the management of the authorities of North Carolina Insane Asylum at Raleigh; but in the absence of such an Institution I still insist upon the practicability and expediency of my suggestion, believing it will work no material ill, and that it will further the ends of justice by furnishing the best means of demonstrating the responsibility of the malingerer, and the irresponsibility of the insane criminal.

J. F. MILLER.

E. N. C. Insane Asylum, May 12, 1890.

UNCONTROLLABLE VOMITING AND ALBUMINURIA DURING PREGNANCY.

A primipara, age 22, menstruated last in the beginning of July, 1889. During August she began to suffer from nausea and vomiting; at first only in the morning, from 7 a. m. to 11 a. m., immediately after rising; but during September the vomiting became more severe, commencing during the night and lasting all morning. She vomited everything she took. At about this time she came under my observation; and all the ordinary remedies were prescribed in succession but without result, and the vomiting became almost continuous. When I saw her again, after an interval of several weeks, she was much emaciated and looked very ill, her face wore an aspect of anxiety, and there existed slight jaundice. Her bowels were unusually constipated, but sometimes her motions were loose and black. No physical sign of hepatic disease. No fever, heart and lungs healthy; uterus presented normal characteristics of five months pregnancy; urine contained ulbumen and bile pigment, but no casts could be discovered. I prescribed hydrate of chloral, in 1-grain doses, every quarter of an hour, and iced milk. Three days later she was much better, had only vomited a few times, had kept down a considerable quantity of milk, and had slept fairly well. Next day when called in I found her in convulsions. I at once administered chloroform to her and the convulsions ceased, having lasted for one hour and a half. After a coma of several hours she awoke quite confused, talked unintelligibly, and would not answer when spoken to. A few hours later she had another attack of convulsions which lasted about an hour and was followed again by coma from which she awoke in similar condition as before. Vomiting had ceased; the urine was very albuminous and contained casts. Chloral and bromide of potassium were administered; and I now decided to induce miscarriage, which terminated naturally, five hours later. During labor she had another attack of convulsions, and had to be kept, more or less, under the influence of chloroform. There was considerable post-partum hæmorrhage; the fœtus was natural. She had no more convulsions after confinement, but remained comatose for about four hours, when she became gradually conscious, and when I saw her six hours after labor she was quite rational. She made an uninterrupted recovery. The urine became gradually less albuminous, and on the seventh day after confinement the albumen in the urine had entirely disappeared.

I called this case of vomiting uncontrollable, because all the usual remedies had failed to relieve it and it affected the health of the woman seriously. The hydrate of chloral, which appeared to relieve the vomiting somewhat, when prescribed later, had failed when I prescribed it at an earlier stage. Numerous theories have been advanced to account for this obstinate vomiting of pregnancy. It has been regarded as peculiar to the rigidity of the uterine muscular fibres, to a rigid state of the os, to uterine lesions, to flexions and distortions of the uterus, etc.; but all these conditions, though so frequent in pregnant women, are often not present in cases of vomiting. I have seen this vomiting in multiparæ where the uterine tissues are lax and where the os is soft, easily dilatable, and even patent enough to admit two figures.

In every case of rigid os I have met with vomiting was absent. How many cases of pregnancy do we not meet which are complicated with cervical endometritis, flexions, etc., and which are uncomplicated even by simple vomiting? And, if they should be so occasionally, how do we explain the disappearance at the end of a few months' pregnancy of even severe vomiting, and that, too, spontaneously, often very suddenly. I rather think that it arises simply and purely from an idiosyncrasy in the individual, predisposing her to morbid reflex actions. Vomiting, of course, may be aggravated by other conditions present, such as irregularity in the diet, undigested matters in the alimentary canal, etc. Therefore we often may cut short the vomiting and prevent the severer form by regulating the diet in the beginning. The case I reported here was entirely free from any uterine abnormalities, but was complicated by albuminuria; but I do not think that the vomiting and the albuminuria stand in any casual relation to each other; on the contrary, they occurred together in the same individual accidentally. It has been shown that even in normal pregnancy the liver and the kidneys undergo what is called by pathologists cloudy swelling, and occasionally this change may proceed farther and pass into acute fatty degeneration. The same may occur in other glands. Whether this has something to do with the vomiting in pregnancy, as some think, is very questionable.—*A. A. Henske, M.D., in St. Louis Clinic.*

MINUTES

—OF THE—

THIRTY-SEVENTH ANNUAL SESSION

——OF THE——

Medical Society of North Carolina.

Oxford, N. C., May 27, 1890.

First Day—Morning Session.

The meeting was called to order by the Chairman of the Committee of Arrangements, Dr. J. M. Hays, of Oxford.

Prayer was offered by Rev. W. L. Cunninggim, of the Methodist Church.

The Address of Welcome was made by Hon. A. H. A. Williams, of Oxford, as follows:

Mr. President and Gentlemen of the Medical Society of North Carolina:

On behalf of the citizens of Oxford I welcome you as guests whose presence we greet as fraught with much of joy, instruction and edification. The welcome which we deem it a peculiar and signal honor to tender you, is sincere, hearty and unaffected. It is deep enough and comprehensive enough to include all the members of your Association, whether contemplated in their corporate capacity or individually, as representative men of a time-honored profession. Oxford realizes that none other than the heartiest welcome would be worthy of the State Medical Society or adequate to the demands of this occasion. I am therefore empowered by her citizens to say that she stands ready and willing, with open doors, with open hands and with open hearts to discharge every requisition made on her courtesy and hospitality.

From the remotest period of antiquity your profession has been one of usefulness and honor. Its mission has been of a worthy and exalted character, and its membership at all times composed of men of skill, intelligence and ability. The interchange of opinions between intelligent physicians of varied experiences, of varied fields of observation, is of untold and incalculable value. Those inclined to self-conceit and arrogance find that they do not know everything. Those of too much modesty and diffidence are encouraged and timulated by seeing and learning that they possess at least as much ability as many of those who have achieved success. The spirit of honorable rivalry and friendly emulation incites a zeal for victory, and a diligence to secure it, that increases the extent and accuracy of your knowledge. The preparation of papers to be read, of speeches to be delivered, of facts to be presented, of data to be preserved, tends to improve all engaged in such labors as well as those who enjoy the fruits thereof. In short, your sessions are short scholastic terms in which all of you, as so many pupils, however old or young you may be, can drink draughts from tha fountains of medical knowledge.

The advantages of your Society cannot at the first blush be fully comprehended. They are too vast and far-reaching to be taken in at the first glance or by a single mind.

In glancing over this assemblage of physicians I observe several gentlemen known to me personally of distinguished ability, of whom our whole State has abundant reason to be proud, and for whom you gentlemen cherish the profoundest respect and consideration. They are men of mark. They would be men of mark in any country, in any age, in any deliberative association or any department of life. In speaking of them as bright stars in the intellectual firmament of their profession, the tribute to them is not fulsome or over-wrought. It falls short rather than exceeds the limit of compliment to which they are justly entitled. Hence arises the natural enquiry, Why is it that in a profession thus amply supplied as is the Medical Faculty of North Carolina with men of acknowledged genius, learning, practical wisdom, men eminently versed in the science, both of surgery and medicine, that there are so often various types of patients who must of necessity seek medical treatment beyond the limits of the State.

Thus hundreds of invalids go abroad to seek medical attention, each recurring year, not from choice, or whim, or conceit of fancy, but in obedience to advice from their regular home physicians and from the impracticability of otherwise obtaining proper medical service. Is it not feasible, by deliberation, by wisdom, by concert of action on your part, in great measure to correct this state of affairs?

The trouble is, "a condition, and not a theory, confronts us," the necessity of which, I am sure you deplore, and trust you will be able to lessen, if you cannot wholly extirpate. The objection that much money is taken from the State never to return, is secondary in comparison wiih the inconvenience, annoyance and other disadvantages that are transparent on a moment's reflection. Among these disadvantages the sparseness of population, the lack of large cities and the dearth of money are hindrances not readily surmounted, still I opine that much at no distant day will be accomplished through your honorable organization to overcome these difficulties.

It is to be hoped that an advanced step will be taken in the formation of suitable homes or hospitals where our sick people can be treated by our own doctors and in our own State. Accomplish this, gentlemen, and you will have added another link in the chain of gratitude that endears you to the people.

We read that "when Captain Murrel, of the steamship Missouri, beheld the Danish steamer Denmark, with her seven hundred passengers lying helpless in mid-ocean, he was compelled to decide between landing his valuable cargo or saving the lives of these human beings. Right quickly did he decide. Overboard went the cargo, and he had his reward in the love of the rescued, the approval of his employers, the praise of millions in all lands, testimonials from the known and unknown, and finally crowned with the honor of knighthood by the King of Denmark." I would not disparage one word of praise thus bestowed on Capt. Murrell. I would prefer to add another leaflet of honor to his brow. But were the noble deeds of the men of your fraternity, which are often no sooner rendered than they perish in oblivion, were the noble deeds of sacrifice, of comfort, of fortune, of time, yea, of life itself, fully known and duly recognized by Government in the bestowal of its dignities and its honors, neither the sailors, who brave the dangers of the ocean and fight in defence of their flags the naval battle of the country, nor the soldiers who "dare or die" in defence of freedom's battles, are more entitled to knighthood than the grand, benevolent, big-hearted physician, who, by night or by day, in storm or fair weather, in sickness or in health, in adversity or prosperity, go forth, "like angel's visits on embassies of love," to alleviate suffering humanity.

Of course, then, I do not undervalue the distinction of being the medium of conveying to you a welcome, "the warmest of warm welcomes," to our homes and firesides. As your Society is a growing, enterprising, progressive organization, it is with peculiar fitness that you are holding a session of your Convention in the growing, enterprising, progressive town of Oxford, an embryo city, with the best social, intellectual, educational, moral and religious advantages. Possessing such a town as this, in the enjoyment of superior railroad facilities, with a salubrious climate, flanked on all sides with the best soil in the world for the growth of the bright leaf tobacco of golden hue, silken texture, exquisite aroma and international fame, what prevents Oxford from being one of the most populous cities of North Carolina, as she is to-day one of the most pleasant places of abode on the American continent. I am sure you have heard of the fame of Oxford, and I am gratified that you are here in person to see her nestling in beauty on the healthy hills of Granville. I am particularly gratified that you have come at this season of the year when Oxford is clad in natural robes of verdure and loveliness which seemingly, in unison with the spirit of the hour, are waving you a gladsome, spontaneous welcome.

Dr. J. A. Hodges, of Fayetteville, made the response on behalf of the Society in the following words :

It is a high privilege, Mr. President, to respond to so generous a greeting! and for the kind words of welcome, sir, which you have been pleased to extend in the name of your citizens, I would, on behalf of my colleagues, return our most cordial and grateful thanks.

Pleasure hath her votaries no less renowned than science, and I am not slow to admit that such reunions as we have witnessed here to-day, such commingling of brother with brother and friend with friend, are not the least charming incidents of our annual convocations. Wearied and worn by the labors and fatigues of a life that seemingly has no ending, this respite from duty, this surcease from care, this meeting new friends, this renewing old acquaintances, is, indeed, to us a pleasure, sweet as it is refreshing, and exhilirating as it will be enduring.

From year to year we have been accustomed to meet in every section of our State, even from where the grand old Alleghanies look down into the chambers of the setting sun all along to the ocean-washed shores of Eastern Carolina, and on every occasion we have been proffered the distinguished courtesies of an honored reception; but from what I have already experienced and witnessed here, I am assured that no more generous-hearted nor open-handed welcome has ever been tendered the Medical Society than in this, the town of Oxford, amid the hills of old Granville.

As students of North Carolina history, we are not unacquainted with, nor unmindful, nor unappreciative of the conspicuous part played by the sons of Granville in the historic past. The historian Wheeler, in writing of the past history of your county, devotes but one single line to it: "Her citizens early took a decided stand for liberty;" but how full of meaning these words! How pregnant with the data of unwritten history, the pride and glory of many a vanished time! Even now, would we have the sparks of a living patriotism kindled afresh in our loyal hearts, we have but to remember for the inspiration a Person or a Penn, a Benton or a Hunt, names inscribed "High on the dusty roll which ages keep." And in later years the same chivalric and dauntless spirit has animated your sons and characterized their actions, as attested in our State's annals by their deathless valor and quenchless bravery along the fiery crests of an hundred battle-fields.

Or if, as North Carolinians, we prize intellectual worth and true nobility of soul, we should not forget your bright galaxy of distinguished talent: Among others, your Hendersons and Williams';

your Venables and Gilliams; your Kyles and Kingsburys'—illustrious sires of as illustrious sons.

But from these glories of the past, grand and inspiring as they are, we must turn to the present, with its potent promises. You have not asked us to follow you forth into the mystical realms of the witchland and list for many a dreamy hour, perhaps, to some fabled myth of the falries concerning the mouldering landmarks of the past hereabouts, nor study with you the fast crumbling monuments of a now decaying civilization; but rather you have invited us out into the broad and open sunlight of to-day into the stirring scenes of the acting present, into the busy hives of your many industries, as you have with commendable pride so eloquently depicted them, and bade us learn well for ourselves the lessons of your thrift and prosperity as writ in living letters of golden promise above the shining portals of your coming city.

For seventy years Oxford has been distinguished as the centre of culture and refinement and renowned as such the State over. It is said when it voted but sixty-five whites that twenty-five of them could have written a respectable essay for publication. Those of her sons who have remained within her gates and those who have gone forth to win distinction and proud honors abroad, have alike influenced the destinies of the State and of the Nation.

The social and civil, as well as the religious and educational, institutions of Oxford have long been her pride and boast, but chiefest among them all is yonder noble edifice, in which every true North Carolinian feels a peculiar pride and pleasure. It is the offspring of a noble charity dedicated to helpless humanity. It is a true and fitting monument of that spirit of charity which prevails throughout our land, which is neither the fruit of study nor the privilege of refinement, which in its ministrations knows no sect, no creed, no class, but over all alike spreads its white wings of protecting love. Be there known in our fair State either grief or penury; be there heard either sighing or sorrow; be there, indeed, sickness and suffering, no matter how humble; be there sin and misery, no matter how degraded, the gentle hand of humanity, if need be, stays the fiat of wayward fate, and in faith and hope and love points earth's sick and suffering ones to yonder temple of North Carolina's noblest charity. Forever honored be this sacred work of humanity, this grand and glorious Institution to charity! The recording angel of abiding justice will preserve its annals of generous deeds, and the soul from whence it sprang shall be immortal.

In short, I would congratulate you, men of Oxford, upon this beautiful specimen of your handicraft, this lovely town of yours—the Queen City of the Golden Belt.

The home of a brave and hospitable people, she stands to-day but upon the threshold of her greatness, and through the half opened door of the future streams the glad light of a grander day; her soul is fired with the breath of a new-born life, her energies are quickened with the impulse of a new blood, and she is thrilling to-day with the consciousness of a growing power and prosperity, Her country-sides are her storehouses of inexhaustible mineral wealth, and her fertile fields are yellow with the golden splendor of "Granville brights," that in the gladsome harvest time shall reflect not only the sunlight of this happy land, but as well the happiness and wealth of her favored people. I salute you and bid you god-speed in this great work of industrial redemption and prosperity.

In closing, sir, I would tell you that we shall not soon forget your eloquent words in regard to our honorable profession. In contributing to our advancing civilization no profession has been more active or useful than ours, for in erudition and scientific investigation, as well as in devotion to suffering humanity, the medical profession is excelled by no other, and the promises of the past have been more than fulfilled by the successes of the present. And now, standing between the past and present and amid the conflicts of truth with error, we are rejoiced to tell you that we see already in the scientific developments of future medicine the dawn of a new and brighter era.

Once again, ladies and gentlemen of Oxford, I would return thanks for this welcome to the civic freedom of your lovely town, where your fair daughters are always fairest in their lovely beauty, and your gallant sons always warmest in their generous hospitality, and I would wish for you that, as in the past, so now, and ever in the future, peace and prosperity may dwell within your borders, plenty and her handmaiden prudence preside at your board, and health and happiness strew along your pathway the flowers of perpetual youth—in short, that your homes may ever be your castles, wherein each coming guest, as we to-day, shall be made happy by the benedictions of your welcome.

Dr. Geo. Gillett Thomas, President, then took the Chair, saying: Gentlemen, a very cordial welcome has been extended you, and fittingly accepted on behalf of the Society. Let us go to work and show that we are worthy of this generous hospitality.

The Secretary then called the roll, the following members being present:*

Dr. S. Westray Battle, U. S. N. Asheville, N. C.
" J. W. McNeill, Fayetteville, "
" R. A. Patterson, Aurelian Springs, "
" J. E. Brothers, Wilson, "
" C. M. Poole, Salisbury, "
" B. McBryde, Maxton, "
" Thomas Hill, Goldsboro, "
" Allmand Holmes, Clinton, "
" J. S. Royster, Townesville, "
" C. T. Wyche, Dabney, "
" H. P. Murray, Plymouth, "
" W. E. Turlington, Benson, "
" B. S. Utley, Holly Springs, "
" W. W. Griggs, Elizabeth City, "
" O. McMullan, " "
" G. W. Purefoy, Asheville, "
" Geo. Gillett Thomas, Wilmington, "
" R. J. Noble, Smithfield, "
" Thomas F. Wood, Wilmington, "
" P. L. Murphy, Morganton, "
" Francis Duffy, Newbern, "
" W. Best, Johnson's Mill, "
" H. T. Chapin, Pittsboro, "
" Wm. Hicks, Fish Dam, "
" James A. Hodges, Fayetteville, "
" Julian M. Baker, Tarboro, "
" N. B. Herring, Wilson, "
" W. H. Whitehead, Attleborough, "
" A. Anderson, Wilson, "
" W. G. Freeman, Murfreesboro, "
" H. O. Hyatt, Kinston, "
" Thos. M. Jordan, Hookerton, "

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*Taken from book of registration.

Dr. J. D. Roberts, Durham,	N. C.
“ J. Howell Way, Waynesville,	“
“ J. W. Faison, Mt. Olive,	“
“ R. H. Speight, Tarboro,	“
“ F. C. James, Bethel,	“
“ Will B. Crawford, Lexington,	“
“ C. H. Lewis, Farmers,	“
“ W. J. Jones, Goldsboro,	“
“ Geo. W. Long, Graham,	“
“ John McDonald, Washington,	“
“ L. A. Hanks, Pittsboro,	“
“ T. L. Booth, Stem,	“
“ John Sweaney, Berea,	“
“ L. F. High, Garysburg,	“
“ J. T. Strickland, Thomasville,	“
“ Thomas E. Hilliard, Asheville,	“
“ W. H. Harrell, Williamston,	“
“ C. J. O'Hagan, Greenville,	“
“ W. C. McDuffie, Fayetteville,	“
“ A. B. Pierce, Weldon,	“
“ O. Gregory, Oxford,	“
“ H. B. Weaver, Asheville,	“
“ M. P. Perry, Macon,	“
“ J. L. Edgerton, Hendersonville,	“
“ John H. Williams, Asheville,	“
“ L. G. Broughton, Reidsville,	“
“ A. W. Knox, Raleigh,	“
“ W. P. Whittington, Asheville,	“
“ J. A. Reagan, Weaverville,	“
“ W. J. H. Bellamy, Wilmington,	“
“ W. R. Wood. Raleigh,	“
“ J. B. Dun, “	“
“ E. H. McCullers, Clayton,	“
“ J. M. O'Kelly, Williams' Mills,	“
“ S. D. Booth, Oxford,	“
“ D. C. Parris, Hillsboro,	“
“ J. P. Munroe. Davidson College,	“
“ J. A. Faison, Mt. Olive,	“
“ J. C. Grady, Lenoir Springs,	“

Dr.	G. H. Dodd, Clayton,	N. C.
“	W. H. Lilly, Concord,	“
“	M. E. Robinson, Goldsboro,	“
“	R. S. Young, Concord,	“
“	W. C. Galloway, Snow Hill,	“
“	A. R. Zollicoffer, Weldon,	“
“	A. B. Lyman, Baltimore, Md.	
“	D. B. Zollicoffer, Garysburg,	“
“	Theo. F. Meisenheimer, Marven,	“
“	F. R. Harris, Henderson,	“
“	L. E. Norfleet, Tarboro,	“
“	K. M. Ferguson, Cameron,	“
“	J. E. Ashecraft, Monroe,	“
“	E. T. Speed, Coakley,	“
“	W. A. Monroe, Waxhaw,	“
“	M. C. Hunter, Huntersville.	“
“	George A. Foote, Warrenton,	“
“	J. P. Smallwood, Lewiston,	“
“	R. E. Hinman, Charlotte,	“
“	H. H. Harris, Wake Forest,	“
“	M. Bolton, Rich Square,	“
“	Wm. A. Graham, Charlotte,	“
“	Robert L. Gibbon, “	“
“	J. S. Lafferty, Concord,	“
“	W. T. Cheatham, Henderson,	“
“	B. W. Hathaway, Avoca,	“
“	O. H. Boynton, Lisbon, N. H.	
“	D. N. Sills, Castalia,	“
“	G. M. Hackler, Mars Hill,	“
“	L. A. Ceever, Milton,	“
“	J. H. Marsh, Fayetteville,	“
“	Wm. Hill Wilson, Gastonia,	“
“	Wm. H. H. Cobb, Goldsboro,	“
“	Samuel A. Henley, Asheboro,	“
“	L. L. Sasser, Smithfield,	“
“	Eugene Grissom, Raleigh,	“
“	J. C. Walton, Milton,	“
“	Wm. H. Cobb, Jr., Goldsboro,	“
“	Thomas E. Anderson, Statesville,	“

Dr. Jas. L. Nicholson, Richlands, N. C.
“ R. L. Payne, Jr., Lexington, “
“ J. P. Fearington, Faison, “
“ Geo. S. Lloyd, Tarboro, “
“ W. S. Anderson, Wilson, “
“ W. D. Pemberton, Big Lick, “
“ S. S. Satchwell, Burgaw, “
“ J. J. Summerell, Salisbury, “
“ J. A. Wise, Roxboro, “
“ P. B. Loftin, Grifton, “
“ John H. Tucker, Henderson, “
“ J. T. Nicholson, Bath, “
“ G. L. Wimberley, Rocky Mount, “
“ J. C. Braswell, Whitaker, “
“ E. G. Moore, Toisnot, “
“ Henry T. Bahnson, Salem, “
“ John W. White, Wilkesboro, “
“ Archibald Cheatham, Henderson, “
“ John W. Taylor, Union, “
“ John M. Manning, Durham, “
“ J. M. Hodges, La Grange, “
“ J. M. Kirkpatrick, La Grange, “
“ H. H. Whitaker, Old Sparta, “
“ E. A. Spica, Mt. Pisgah, “
“ J. L. McMillan, Red Springs, “
“ A. T. Cotten, Morrisville, “
“ James R. Rogers, Apex, “
“ H. B. Marriott, Battleboro, “
“ J. A. McLelland, Mooresville, “
“ M. R. Adams, Statesville, “
“ Thoms P. Wynn, Tarboro, “
“ J. M. Emmett, Oxford, “
“ J. M. Hadley, La Grange, “
“ Richard H. Lewis, Raleigh, “
“ John C. Kirkman, Mt. Vernon Springs, “
“ S. T. Nicholson, Washington, “
“ I. G. Riddick, Youngville, “
“ S. L. Montgomery, Monroe, “
“ M. R. Braswell, Rocky Mount, “

Dr. G. W. Kernodle, Altamahaw,	“
“ W. B. Crisp, Roxboro,	“
“ Jeff. D. Jenkins, Tarboro,	“
“ J. P. Battle, Toisnot,	“
“ L. J. Picöt, Littleton,	“
“ John L. Ray, Burnsville,	“
“ J. J. Mann, Nashville,	“
“ B. Chears, Thomasville,	“
“ K. P. Battle, Raleigh,	“
“ James W. McGee, Jr., Raleigh,	“
“ Willis Alston, Littleton,	“

The President asked for report of Board of Censors holding over from last year. No report.

The following committees were announced :

Cammittee on Credentials.—Drs. S. D. Borth, J. H. Way and L. J. Picöt.

Committee on Finance.—Drs. W. H. Whitehead, W. H. Lilly and G. W. Purefoy.

The President then read his address, of which the following is an abstract :

Abstract of the President's Address.

The President in his address called the attention of the Society to their position with regard to the medical laws of the State; that, being the originators of the laws and the medium through which they were presented to the Legislature, it behooved them to provide for such supervision as was within their power for furthering the enforcement of the statutes. After a careful review of the new regulation and a comparatively safe estimate of the number of physicians registered and unregistered in the State, he explained that the registration was adopted as the only means by which all persons styling themselves physicians in this State could be made known. He suggested that the Board of Medical Examiners be asked to assume a supervision of the laws, and to this end he suggested that a member of that Board be designated to keep up with the annual registrations, through the reports of clerks of the counties and by means of correspondence to be established with physicians of recognized character all over the State.

To keep an unbroken line of work in the Board of Examiners, he suggested that a biennial election be held to elect two new members of their Board, these to succeed two whose terms should expire by law, according to a schedule which he offered to the Society.

After a member had served the Society for twenty years, it was thought by the President becoming this Society to release him from payment of all dues and fines, but to continue him all the privileges and benefits of the organization, placing him upon a separate list, to be styled "The Honorary Fellows of the Medical Society of the State of North Carolina." He asked that suitable provision should be made before hand for the proper hotel accommodation of members in towns nominated as places of meeting—in order that the Society might know what rates would be expected of them, and what routes were open to reach the places under discussion.

He called attention to the fact already set forth in the pages of the JOURNAL, that the decision of the Supreme Court of the United States had by their decision in the case of Dent vs. West Virginia forever sets at rest the question of the right of a State to provide protection for its citizens by statute from unqualified practitioners; and it is just as well that this decision of the Justices be held up for the continual inspection of the uncomfortable people who think that the laws now in force are too rigid, or not just.

Dr. R. H. Lewis moved that a committee of three be appointed to consider and report on the suggestions contained in the President's Address. Carried.

The President appointed on said committee Drs. A. W. Knox, L. G. Broughton and R. G. Noble.

Committee on Pittman Prize.—The President appointed on this committee Drs. Thomas F. Wood, H. T. Bahnson and George W. Long.

Dr. Thomas F. Wood introduced the following resolutions:

Resolved, 1st. That the election of a Board of Medical Examiners be made the special order for Wednesday at 10 o'clock, and that the election be proceeded with in continuous session until it is completed.

Resolved, 2d. That a committee of three be appointed to arrange the details of the method of conducting the election, to report at the opening of Wednesday's session.

Dr. O'Hagan asked an explanation of the latter part, and Dr. Wood said that the details in the election of this kind are sometimes very tedious, and that the committee shall arrange a proper proceeding so as to avoid confusion and delay in the election. He gave a brief outline of suggestions as to the points the committee should consider and decide upon.

The resolution of Dr. Wood was unanimously adopted.

Dr. Thomas F. Wood announced that Dr. J. W. Long, of Randleman. had consented to make some demonstrations in urinary analyses which are free to all who take any interest in the matter. He could say for Dr. Long that he had made abundant preparation and made himself skilful in these manipulations, and it will be a matter of great interest and information.

Dr. Long thanked Dr. Wood for his kind indorsement, but said he had just been called home, and would have to leave this afternoon. He would make a few demonstrations before he left.

[Note.—Great interest was shown in Dr. Long's demonstration in urinary chemistry. With good judgment he selected the most practical tests, including Purdy's qualitative and quantitative tests for sugar. This experiment in urinary chemistry ought to encourage the Society to set apart a special hour for demonstrations in open session, as not one-half of those who were anxious to witness the manipulations could crowd into the room assigned to the purpose.]

The Secretary read the following hours for meeting, viz : 9 a. m., 3 p. m., 8 : 30 p. m.

On motion meeting adjourned.

First Day—Afternoon Session.

Meeting called to order at 3 o'clock.

Partial report of Committee on Credentials was read and on motion received.

Dr. L. G. Broughton, chairman of Section on Practice, being absent, the President declared the meeting open for voluntary papers.

Dr. J. Hay Williams, of Asheville, read a paper on "The Propriety of Interference in Gun-shot Wounds of the Abdomen."

On motion, Dr. Williams' paper was referred to the Committee on Publication.

The President called for reports of Chairmen of Sections.

The Secretary read a letter of regret from Dr. John M. Faison for his inability to be present, and stating that he had a paper in preparation, which on motion was referred to the Committee on Publication.

Letters were received from Drs. J. W. Jones, —— Wilson and A. G. Carr, regretting their inability to be present.

The Committee on Credentials reported on the name of Dr. J. H. Marsh, of Fayetteville. Report accepted.

Dr. J. D. Roberts asked to have his name recorded in the negative on the question of referring Dr. Faison's paper to the Committee on Publication, as he did not think it right to refer papers that were not here and not even finished. He did not hear the negative side of the question put to the meeting.

A discussion beginning, the President called the meeting to order, saying it could not be discussed unless reconsidered after motion made and seconded.

A motion to reconsider was made by Dr. S. D. Booth and lost. Dr. Booth explained his motion as only intended to get the discussion.

Dr. J. W. Long read a paper on "The Use of the Curette after Labor and Abortion."

He had to stop before finishing his paper, being called home by telegram, and on motion of Dr. McDuffie it was referred to the Committe on Publication.

Dr. R. H. Lewis, as chairman of the committee to consider the suggestions in the President's address, read the following report:

Your committee, appointed to consider and report upon the recommendations contained in the admirable address of our President, would respectfully advise the passage of the following resolutions.

In regard to the change in the terms of office of the members of the Board of Medical Examiners to be elected at this meeting in order that the Board may hereafter be a continuing body—

Resolved, That the seven members of the Board be divided into three classes, one of three members to be elected for six years; one of two members to be elected for four years, and one of two members to be elected for two years; and that their successors be elected for six years.

In regard to some provision for the practical and effective enforcement of the Law Regulating the Practice of Medicine—

Resolved, That a committee of seven be created by the Society, whose duty it shall be to see to it that the law is enforced throughout the State, and that this committee be composed of those members of the Society who shall be elected members of the Board of Examiners.

Resolved, That any one accepting a position upon the Board of Examiners is understood to accept the duties and responsibilities imposed by the Society in the foregoing resolution.

Resolved, That the committee be authorized through its chairman to draw on the treasurer of the Society for sums of money as they may be needed for the above purposes, aggregating not more than $600, during the coming fiscal year.

In regard to the place of meeting—

Resolved, That a special committee of five be appointed by the President to receive propositions and select the place of meeting for the next ensuing session.

We would recommend that those desiring to have the Society meet in their town appear before the committee prepared to give the hotel accommodations and the rates.

In regard to the creation of Honorary Fellows—

Resolved, That those who have been members of the Society for thirty years, and who have paid their annual dues for the same length of time, be made at the expiration of that period Honorary Fellows, who shall have all the privileges of the Society while exempt from its dues.

Richard H. Lewis,
L. G. Broughton,
R. J. Noble.

The sections were then taken up separately.

Section 1, Dr. Lewis said, was to prevent the election of an entirely new Board at any time.

It was adopted unanimously.

Section 2.—Dr. Lewis called attention to the fact, as mentioned by the President, that there were 599 unregistered persons practicing medicine in the State, and therefore violating the law. If an individual were to report these men it would be looked upon as an act of jealousy, and it was important to appoint a committee whose duty it shall be to look after the enforcement of the law. This committee being elected become not only officers of the State as Medical Examiners, but are the servants of the Society, whose duty it shall be to bring complaint against these men. If there be not money enough in the treasury, he was in favor of making the assessment for this year $3.00. Now is the time, this is the year, for us to see that the law is enforced.

Dr. O'Hagan asked for the reading of that clause of the law relating to registration.

It was read by the Secretary.

Dr. Grissom thought there was such a thing as too rapid progress even in reform. There is such a thing as too rapid execution of a law, by which a revulsion of public sentiment is brought about. As had been stated, there were about one-fourth of the practicing physicians of North Carolina who had failed to register. The time given in which to register was very short, and the penalty is a serious one. He spoke of the fact that even deeds for real estate have remained unregistered for fifty years. He undertook to predict, and predict with pain, that with a rigid execution of this law now upon six hundred doctors in the State, will produce such a revulsion of public sentiment that the next Legislature will sweep the entire law from the statute books. No man here will be in favor of it, and no man will use his influence in favor of it. What it is the power of this Convention to do he was not prepared to say. He thought it advisable to prevent a speedy, rapid and severe execution of the law by showing indulgence. He thought such action would be founded in wisdom. He mentioned that one of the most prominent men in the State, sitting in his hearing, had failed to register. Can you undertake to enforce this law with such short notice? Over 25 per cent. of the medical body of the State had failed to register. Enforce this law rigidly on these six hundred men, and the whole law will be repealed. He called to mind a time when the law came within one vote of falling through, the credit for its rescue being due to himself. Put to the test these six hundred men, and he would undertake to say that at the next Legislature a much larger committee would have to be appointed to prevent the whole law being swept from the statute books.

Dr. Foote thought Dr. Lewis had introduced two years ago a resolution appropriating $500 to this very purpose. He judged other counties by his own, where no physician was allowed to practice who had not complied with the laws. He was opposed to taxing the Society an extra dollar to enforce a law which is already enforced if members of the Society will do their duty. In regard to the bugbear of the law being repealed, this has always been held up before the eyes of the Board of Examiners. He would stand boldly and say enforce the law, and if they want to repeal the law let them do so. If the law breaks down it will do so in a fight for progress. We will have the pride and satisfaction of knowing we have tried to elevate the status of medical science in this State. We stand equal to any State in the Union—we are the pioneers, and graduates from New York or New Orleans must come well prepared if they receive their diploma to practise among us. And if you think that the people want to repeal this law because six hundred men have failed to comply, you are mistaken. The people are just awakening to what we are doing in this matter. The Legislature will not be gerymandered in this thing, and he is proud to say that in his county, even if the law were repealed, no man could expect to receive any practice who had not passed our Board of Examiners. The gentleman who preceded him spoke with a great deal of truth as far as it went. This Society is an organized part of the State law. You are asked in going before a court of justice to give expert testimony if you are a member of the State Society, and if you are not, your testimony loses some of its weight. Why cannot each county do as Warren county does? The Judge of the Circuit Court brings the matter before the grand jury. If the Legislature repeals the law it will not die "unhonored or unsung."

Dr. Lewis thought there was a great deal of truth in what Dr. Grissom said, but thought he expressed it a little more strongly than the facts warranted. He thought there are not really so many unregistered physicians in the State.

[The President stated that the list was made by comparing the returns from county clerks and comparing it with the list of those to whom notices were sent.]

Dr. Lewis, resuming, said there has been a wonderful growth in the sentiments of legislators in favor of this law. He recalled the fact that in 1885 there was some trouble in securing the passage of the law, some compromises having to be made, but states that at the last Legislature there was no obstacle. He did not suppose the Board that would be elected would be cruelly severe in the enforcement of the law, but would recommend that they try to get the delinquents to obtain temporary license. He said that six months notice was given, and the cost of registration was only 25 cents, and he thought those who have not registered have failed to do so simply from pride and obstinacy. He thought it very imimportant to have the law enforced.

Dr. Bahnson said his feelings were very decided. He thought there was a great deal of right in what Dr. Grissom said, and yet he for one, as a member of the Society, could not afford for the Society to stand in a false light before the people. Of what avail will be our labor to effect the passage of the law if we stultify ourselves by making a dead letter of this law. He said the law was now on the statute books. It is not for the Board of Medical Examiners to show mercy or anything of the kind. It is a matter for the courts. Let the innocent prove their innocence before the courts. Let the penalty be held over them for the time if necessary. He did not want the Society to hesitate for a moment in having this law carried out to the full.

Dr. Booth thought the most of those who have failed to register are the quacks and charlatans who are afraid to show their faces in the court houses. A private individual in reporting them would be adjudged acting from jealousy.

Dr. O'Hagan did not intend to take any part in the discussion. He regretted very much having to differ from the gentlemen who drew up the resolution. He knew something of the temper of the people. He said he regretted that the erroneous idea existed that Medical Society of North Carolina was of the same nature as an organization existing among the agricultural classes with the object of self-protection. He was the last man on the floor who would shrink from any responsibility. He would not abate one jot or tittle of the law, but is impressed by the old adage "go slow." He objected especially to making the Board of Examiners a prosecuting agency. He did not think they should be burdened with the onerous and disgusting task of hunting up the miserable medical gorillas on the outskirts of our profession. Cannot well educated and competent physicians hold their own against them ? He believep a feeling of sympathy would be created in favor of the delinquents that would result in sweeping the whole thing away.

Dr. Poole made the statement that there would be only about ten dollars left in the treasury, and the assessment would have to be doubled if the resolution were adopted.

Dr. Robinson thought Dr. Grissom's point well taken. He thought half the physicians of Goldsboro had failed to register from simple neglect. He himself was among the number. He thought it would be a hardship if the law is enforced vigorously now.

Dr. Whittington said there is a medium that ought to be reached. He was pretty certain that there are not five hundred reputable physicians in North Carolina who have failed to register. At the same time there are some, and he thought they did not understand the purport of the law. He was in the Assembly when the bill was passed, and there was hardly a dissenting voice. He knew one reputable physician who had failed to register, but his name now appears on the clerk's book under date of December 31st, 1889. He suggested that a resolution be adopted saying that those who have failed to register by June 1st, 1890 would not be prosecuted before the 15th of July, but after that time the law would be enforced to its fullest extent.

Dr. W. J. Jones thought the discussion was reaching quite a length and unnecessarily. He thought it is not the Society's business to sit in judgment on the laws of North Carolina. The law is a fixed fact. Leave it to the officers of the courts of North Carolina—to the solicitor sitting there, knowing the law full well. We want no class legislation. We hear our treasurers say the coffers are empty and we are opposed to high taxes in the Society as well as in national affairs. He thought it unnecessary to discuss the matter farther. He hoped it would be voted down.

Dr. Holmes thought the discussion entirely out of place. The Society has asked for a law and the Legislature has passed it. Let it rest now as it is.

Dr. Pierce thought we had gotten into a dilemma. It has debarred from practicing a great many worthy men who through neglect had failed to register. He mentioned two men who had registered, one having attended only one course of lectures, and the other none at all. Another one, an excellent physician, had neglected to do so. He is a licentiate of the Board. He thought the law unconstitutional—*ex post facto*—and would have fought it had he been in the Legislature. After the Board has licensed a man can we come and say he must stop practicing because he failed to register? He had it from the Attorney General that in his opinion the law was only intended for those who were not licentiates of the Board—that those who had been practising and were licensed by the Board were still entitled to practice.

Dr. Lewis stated that he was called in consultation with the Attorney General before he rendered his decision, and he gave it as his opinion that *no one* could register now without a new license. Those holding a license from the Board would have no trouble in getting a duplicate.

Dr. Pierce thought it hard that those incompetent men who had registered should be privileged beyond those good men who through neglect had failed to do so. He opposed making the Board of Examiners a board of inquisition.

Dr. Grissom offered an amendment to the section that unregistered physicians be allowed until January 1st, 1891, in which to register.

Dr. Holmes moved a second amendment by striking out that part making the seven Examiners the committee.

Dr. Bahnson moved an indefinite postponement of the whole section. Carried.

Section 3 was read. (Referring to time and place of meeting.)

Dr. Faison objected because this was the only business of the Society not done by a committee, and he did not want to lose this little fun.

The question being put to the house, the section was lost—after division was called for.

Section 4 was read. (Referring to Honorary Fellows.)

Dr. Thomas F. Wood explained that some eminent members of the Society going out of practice as they advance in years, fail to send their dues to the treasurer and their names are dropped from the roll. Among those so failing have been some of the founders of the Society.

The motion was adopted unanimously.

The report of the committe as amended was accepted.

The Committee on Credentials reported on the name of Dr. J. G. Riddick, Youngsville.

The President introduced to the Society Dr. Wm. A. Hammond, of Washington, D. C.

Dr. Hammond expressed great pleasure in being asked to be present and addressing a Society in a State he has long honored and respected. He delivered an interesting and instructive lecture on the "Differential Diagnosis of Diseases of the Spinal Column."

Dr. Herring asked remarks from members on Hydro-rachrachis.

Dr. Long asked Prof. Hammond's opinion as to excessive sexual indulgence in the etiology of locomotor ataxia.

Dr. Hammond considered it a very prolific cause of all spinal diseases. He believed that 99 per cent. of spinal diseases was caused by excessive sexual indulgence, excessive alcohol and syphilis. These three, and the greatest of these is sexual indulgence.

Dr. Long moved a vote of thanks to Dr. Hammond, and it was adopted without hearing the negative side.

The President appointed on the committee to formulate rules for the election of Medical Examiners Drs. Thomas F. Wood, S. W. Battle, J. W. McNeal.

On Board of Censors Drs. W. C. McDuffie. R. L. Payne, Jr., T. A. Anderson.

The Committee on Credentials reported the name of Dr. J. H. Marsh, of Fayetteville. Report accepted.

On motion, the meeting adjourned.

First Day—Evening Session.

Meeting called to order at 9 o'clock.

On motion of Dr. Holmes it was decided to request Dr. Hammond to furnish the Society a copy of his interesting lecture of the afternoon to be referred to the Committee on Publication.

The President announced as the order of business the reading of the Annual Essay by Dr. J. W. Faison.

Dr. Payne, Jr., was much interested in Dr. Faison's paper, and moved it be referred to the Committee on Publication. Carried.

The Committee on Credentials reported the names of Drs. John W. Booth, Tally Ho; T. L. Booth, Tally Ho; Wm. G. Stafford, Hendersonville; J. L. Egerton, Hendersonville; John Emmett, Berea; J. S. Lafferty, Concord; W. A. Graham, Charlotte; Robert L. Gibbon, Charlotte; C. E. Hilliard, Asheville; B. W. Hathaway, Avoca; L. A. Hanks, Pittsboro.

Report accepted.

Dr. C. M. Poole read the following in reference to an Inebriate Asylum:

Whereas, It is the sense of this Society that the inordinate use of alcoholic stimulants is a disease as well as any other departure from the normal, healthy state is a disease; and,

WHEREAS, It is believed that, by proper isolation and treatment, many of these cases could be cured and rendered a blessing instead of a curse to themselves and their families; and,

WHEREAS, The Constitution of the State of North Carolina provides that the State shall care for and educate the inebriates of the State; therefore be it

Resolved, That the President of this Society shall appoint a committee of five whose duty it shall be to memorialize the Legislature of North Carolina and urge upon that body the necessity of caring for the inebriates of the State. Adopted.

Dr. Williams said that Dr. Lyman, of Baltimore, was present with a very valuable invention as a substitute for the Tarnier forceps, and asked that he be requested to read his paper.

Dr. Lyman read his paper, illustrating it by diagrams and exhibiting his instrument.

On motion of Dr. Hays, Dr. J. A. Hodges read a paper on "The Insane in the State."

Dr. Booth moved the reference of Dr. Lyman's paper to the Committee on Publication. Carried.

Dr. McDonald asked to correct Dr. Hodges' paper in regard to the insane in Washington county, there being only two in the Poor House and none in the jail. He moved Dr. Hodges' paper be referred to the Committee on Publication. Carried.

Dr. Roberts indorsed Dr. Hodges' remarks, saying it is not an overdrawn picture, but if he errs at all it is in falling short of the true condition. In trying to gather statistics on this subject six years ago he found there were nearly two thousand insane in the State outside of asylums. He thought it a blot on the fair name of the State the way the insane are treated. Something should be done, but what he did not know. He had thought on it, written on it and spoken on it.

Dr. Foote wished to protect the Superintendent of Health of his county and the Board of Directors of the Raleigh Asylum. He thought the asylums should be used primarily for the acute and curable insane rather than for the chronic and harmless insane. The appropriation for the Raleigh Asylum was only $2,500, and there are about 350 inmates in the Asylum now.

Dr. Miller thought the subject very important and interesting, and concerns the State, and thought the paper should be printed in the secular papers for the benefit of the people. He thought the suggestion very wise that a conference of committees from the different asylums, with one from the Society, to consult on this important question. He thought each county should care for its incurable but harmless insane. He said the counties wanted to shift a responsibility and expense on the State and the State could not afford it.

Dr. Thomas F. Wood moved that a committee, consisting of Dr. Hodges and two others to be selected by himself, meet committees from the different asylums. He suggested this as the expense would be considerable, and the Board of Health is empowered to incur the expense of such investigations, and Dr. Hodges was a member of the State Board of Health.

Dr. McDonald asked if there was no way by which the paper could be sent among the people, that in the Transactions it would reach only the profession.

Dr. Wood suggested that Dr. Hodges make extracts from his paper and that the Board of Health would see that it is widely distributed.

On motion the meeting adjourned.

SECOND DAY—MORNING SESSION.

The meeting was called to order at 9 : 45 o'clock.

Dr. Thomas F. Wood presented the following report from the Committee on Rules for the election of Medical Examiners, which was unanimously adopted :

Scheme for Facilitating the Election of the Board of Medical Examiners.

Your committee appointed to suggest a scheme to facilitate the election of the Board of Medical Examiners respectfully submit :

(1). Nominations shall be made in open meeting, and if seconded must be recorded on the blackboard by the Secretary. The Society can at any time declare nominations closed. Voting shall be by ballot. Each member must on the first ballot vote for seven names and no more.

(2). A majority of votes cast is necessary to an election. After counting the first ballot the candidates shall have precedence as follows: The three candidates having the highest majority vote shall be selected to serve for six years, the two having the next highest majority are to serve four years, the next two having the next highest majority to serve for two years.

(3). Should there be no election, or if the entire Board be not elected on the first ballot, a second ballot shall be proceeded with, dropping as many of the lowest candidates as the Society shall determine. No dropped candidate shall be renominated until one election shall have ensued between his first and second nomination.

(The Secretary read invitations for the Society to visit the Orphan Asylum and a ball to be given this evening.)

Dr. Satchwell moved that a committee be appointed to report on a plan for collecting the facts asked for by Dr. Joseph Jones, of New Orleans, as to the medical staff of the Confederate Army.

Dr. Lilly offered as a substitute the following preamble and resolution:

Confederate Records of the Medical Department.

WHEREAS, A movement is on foot under an organization known as the Association of United Confederate Veterans whose objects are to secure, among other things, the following items: (1) Name, age, nativity, date of commission in the Confederate Army, nature and length of the service of each, and every member of the medical corps of the Confederate States Army. (2) Obituary notices and records of all deceased members of the medical corps of the Confederate Army. (3) The titles and copies of all field and hospital reports of the medical corps of the Confederate Army. (4) Titles and copies of all published and unpublished reports relating to military surgery and all diseases of armies, camps, hospitals and prisons. The object proposed to be accomplished by the Surgeon General of the United Confederate Veterans is the collection, classification, preservation and final publication of all the documents and facts bearing upon the history and labors of the medical corps of the Confederate States Army during the civil war of 1861–'65. Everything which relates to this critical period of our national history which shall illustrate the patriotic, self-sacrificing and scientific labors medical corps of the Confederate States Army, and which shall vindicate the truth of history should be industriously collated, filed and finally published. It is believed that invaluable documents are scattered over the whole land, in the hands of the survivors of the civil war of 1861–'65, which will form material for the correct delineation of the medical history of the corps which played so important a part in the great historic drama. Death is daily thinning our ranks, whilst time is laying its heavy hand upon the heads of those whose hair is already whitening with the advance of years and the burden of care. No delay, fellow comrades, should be suffered in the collection and preservation of these precious documents. This task of collection of all documents, cases, facts relating to the medical history of the Confederate Army invites the immediate attention and coöperation of his honored comrades and beloved compatriots throughout the South.

JOSEPH JONES, M.D.,
Surgeon-General United Confederate Veterans.

Resolved, That a Committee of five Confederate veterans be appointed to set on foot a systematic plan to secure the records of the medical department of the late Confederacy.

Dr. Satchwell withdrew his motion and the resolution of Dr. Lilly was adopted.

The Committee on Credentials reported the names of Drs. John L. Ray, of Burnsville, and R. B. Henderson, of Weldon. Report received.

The President announced that the hour had arrived for the election of a Board of Medical Examiners for the State of North Carolina as provided in the special order of business.

On the call for nominations the following were made :

Dr. Geo. Gillett Thomas, of Wilmington, by Dr. Thomas F. Wood; Dr. Julian M. Picöt, of Littleton, by Dr. C. J. O'Hagan; Dr. Julian M. Baker, by Dr. John McDonald; Dr. Wm. H. Whitehead, of Battleboro, by S. S. Satchwell; Dr. W. H. H. Cobb, of Goldsboro, by Dr. Hadley; Dr. W. J. Jones, of Goldsboro, by Dr. W. C. Galloway; Dr. W. H. Lilly, of Concord, by Dr. J. E. Ashcroft; Dr. Allmand Holmes, of Clinton, by Dr. Hill; Dr. J. W. McNeill, of Fayetteville, by Dr. W. C. McDuffie; Dr. Robert S. Young, of Concord, by Dr. Burton; Dr. A. B. Pierce, of Weldon, by Dr. Zollicoffer; Dr. R. L. Payne, Jr., of Lexington; Dr. S. W. Battle, of Asheville, by Dr. H. T. Bahnson; Dr. G. W. Purefoy, of Asheville, by Dr. Whittington; Dr. Dunn, of Raleigh, by Dr. G. A. Foote; Dr. J. H. Way, of Waynesville, by Dr. Wilson; Dr. Geo. W. Long, of Graham, by Dr. Robert S. Young; Dr. John McDonald, of Wasnington, by Dr. Geo. A. Foote.

No more nominations being made, they were declared closed.

Dr. Pierce asked to withdraw his name, but it was objected to by his nominator and was not done.

Dr. McDonald withdrew his name.

The President appointed as tellers Drs. R. J. Noble, J. A. Hodges, E. B. Zollicoffer and ——— Wilson.

Dr. Thomas F. Wood asked for the reading of the report of the Committee on Rules for the election.

Read by the Secretary.

On motion, the special order was waived to receive a report from the Committee on Credentials on the name of Dr. E. R. Michaux, which was accepted.

On motion, it was allowed members of the Board of Examiners who could have only a few minutes to be present to cast their votes at any time before the vote was counted, and the President ruled the same privilege be accorded all members who had just arrived in town.

The first ballot resulted as follows. Total number of votes cast 133—necessary to a choice 67. Of these:

Dr. L. J. Picöt received	110	votes.
" W. H. Whitehead,	93	"
" G. W. Long,	89	"
" Robt. S. Young,	88	"
" Geo. Gillett Thomas,	80	"
" Geo. W. Purefoy,	78	"
" R. L. Payne, Jr.,	74	"
" J. M. Baker,	58	"
" J. W. McNeill,	58	"
" S. W. Battle,	40	"
" W. H. H. Cobb,	34	"
" J. B. Dunn,	34	"
" I. W. Faison,	33	"
" W. H. Lilly,	26	"
" Allmand Holmes,	25	"
" A. B. Pierce,	24	"
" W. J. Jones,	23	"

The seven receiving the highest number of votes were declared elected, the first three to serve six years, the next two to serve four years, and the next two to serve two years.

The President announced the following Committee on Nominations: Drs. Frank Duffy, R. S. Young, W. H. H. Cobb, F. C. James, J. A. Hodges.

Dr. Bahnson rose to make an appeal in behalf of a very worthy member, one whom all his confreres will remember with pleasure—

Dr. G. G. Smith, of Concord. He has occupied many positions of honor. On account of age he has not been able to attend the meetings. He sends his dues and requests to resign. He thought it would be a shame to allow this, and moved that Dr. Smith be elected an Honorary Fellow of this Society, with all the privileges of an active member, but excused from all dues.

The motion was unanimously carried by a rising vote.

The President stated that the hour had arrived for the Conjoint Session with the State Board of Health, and Dr. H. T. Bahnson, President of the Board, assumed the chair.

CONJOINT SESSION.

The Conjoint Session was called to order by the President, who said he had prepared no set address, but wished on behalf of the Board of Health to state a few matters of moment to the Society, and more particularly to the Board.

We come before the Society in a measure as beggars. Each member of the Society, from the fact that the Board is a creature of its making from its very infancy, must take more or less interest in the affairs of the Board. Without the coöperation of the Society, and especially the individual members, the Board of Health, according to the present legislation, is practically powerless. We are merely advisory, not executive. Our powers are limited and our appropriations still more limited.

To properly reach the laity throughout the State, on whom our efficiency entirely depends, we must look to the Society for aid and support. He wished to speak of two points in that connection :

First, the absolute necessity of more efficient means of collecting the nature of prevalent diseases, vital statistics, etc., throughout the different counties in the State, and particularly the larger towns and cities. Many counties are entirely without boards of health. Many of the towns and cities of the State, from two to five, and even ten thousand population, have no system of vital statistics. It is of paramount importance in this day and time, when we are seeking the immigration of the better class of natives, inhabitants of less salubrious, less genial States, that correct ideas of the sanitary conditions of our various towns be properly tabulated and disseminated for the information of those who would come among us. To do this we must look for individuals to stir up the authorities of the towns to secure statistics, especially of deaths. There is not a physician representing any town who has not some amount of influence, and he thought they could use this to bring about this much desired reform. He asked the aid of members of the Society in collecting this greatly desired and needed information.

Second, the importance of bringing before the public the fact that we have a Board of Health, even though only advisory.

Every member of the Society is indirectly a member of the Board, and therefore the appeal comes home to each one. Throughout our State there is a tendency at present to build large private and public edifices of various kinds. The Board of Health has been applied to in relation, he was happy to say, in the building of one educational institution, to inspect and commend or condemn, as may be, the plans of that building from a sanitary standpoint. He alluded to the new Trinity College to be erected in Durham. The importance from a financial standpoint to the institution of such an indorsement on the part of the Board of Health cannot easily be calculated. The statement in the prospectus of catalogues that the plans are indorsed by a recognized body of sanitarians cannot fail to yield a most remunerative return for the little trouble that is expended in securing the services of the Board.

Another institution about to be built has likewise applied. He would urge the aid of members of the Society, so far as it lay in their power, to induce people building private residences, and more especially schools, etc., to have them built under the supervision of themselves, or that the willingness of the State Board of Health to give their services be made known to them. The idea he wished to emphasize on this occasion was to make the Board something more than a mere figure-head in the eyes of other States, and even in our own. It must be brought prominently into notice, and this is the only way we have of doing so.

Dr. O'Hagan thought the ideas of Dr. Bahnson of the highest importance to the whole State, not only from a sanitary standpoint of view, but also financially. From all portions of the United States, and especially from the North constant inquiries are made by persons wishing to come to this section as to the healthfulness of the State. While we can boast of an excellent climate, we are, nevertheless, unable to give that accurate information that inquirers demand, and yet, by a simple act of legislation, it would be possible to meet this requirement. He thought the very first step was to have a law passed requiring the registration of marriages, births and deaths. By this means we could arrive at a pretty correct idea as to the health of the State. We could also find out the preventable causes of disease and apply the proper preventive measures. He was glad to know that the Board was willing and empowered to give their aid in the proper construction of private and public buildings, but regarded the securing of some legislation of the first importance. In all countries claiming any pretensions to civilization you find these laws. In almost every State there has been an effort to obstruct all such legislation. There is no reason why that should be, and combined effort on our part would be productive of much good. He thought it would be possible to drive into the heads of those who will represent us in the next Legislature the importance of this thing. Let us call to their attention the financial benefits that would result. Remind them that the first question of an expectant immigrant is as to the health, water and sanitary precautions. The legislation will be the easier because we are not asking for money. He asked the opinions of the Secretary.

The Secretary of the Board, Dr. Thomas F. Wood, then made a report of the work and progress of the Board, the report being mainly in the form of statistical tables. He was gratified at the growth of the Board, which is now recognized by all the Boards of Health of all the States and larger cities in the Union. This is evidenced by the rapidly increasing library of the very valuable reports sent out by the different State and municipal Boards of Health. The time has come when we may expect more and more fruits.

As regards the matter of vital statistics, he believed that Wilmington and Raleigh* are the only two towns in which strict report of death is made, but asked to be corrected if he were wrong. In these towns the municipal laws require that the undertaker and the cemeetry authorities must have a certificate of death before burial. As an argument for the enactment of such a law is that an application for burial permit without a certificate would raise a suspicion of death by foul means.

He attributed to the publication of the *Bulletin* the satisfactory growth of the Board, saying there is nothing like printer's ink to inform the public of what we are doing, and the Board has used it lavishly. These tables will be printed and put into the hands of all the members, and they will see how the Board has induced, to use a mild term, the county authorities to improve the condition of public buildings.

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*The Society now adds Charlotte, Asheville, and others, perhaps.

He called attention to the prompt remedy the Board offers in time of the incursion of such disease as yellow fever, cholera or small-pox. The State has placed a contingent fund of $2,500 at the disposal of the Board for such an emergency. In case of the appearance of such a disease the Superintendent of Health would report at once to the State Board, who would send a committee and such assistance as was needed to stamp out the disease.

He mentioned the occurrence of glanders among horses in Wilmington about a year ago, when the State Board succeeded in blotting out the disease in two months. It is a disease not only destructive to animal life, but is also communicable to man, therefore it fell within the province of the Board of Health. The Agricultural Department had no provision for the arrest of glanders—a very surprising fact. The law of the State requires that animals so suffering shall be destroyed, but does not place the duty of determining the disease on any one. We had no expert to diagnose the disease, so it devolved upon the Board to employ an expert.

He hoped the profession of the State would be interested not only to do what might be asked of them, but that they would study the matter so as to be able to instruct members of the Legislature as to what the Board is doing and what we want. There are practical matters constantly arising, such as the healthfulness of drinking water. To make this plain, Prof. Venable has been studying the matter and will read a paper giving the result of his researches.

Some months since the Board received information of the appearance of cerebro-spinal meningitis in La Grange among the students in a boy's school. This county is without a Board of Health, but the State Board secured the aid of the local physician, Dr. Hadley, who had consented to make investigations in regard to the water supply and other hygienic conditions.

Dr. Hadley being present, stated he had received a day or two ago the returns of the chemist who examined the water, but he is not yet ready to report.

Dr. Wood continued, saying the Board had the authority to send experts to investigate such conditions, and could in this way be of great aid to schools.

Dr. Satchwell said he had adopted a novel way of getting a hearing on health subjects, by making arrangements with both political parties to give him the first fifteen minutes at every stump-speaking.

Dr. Venable, of the State Board of Health, read a paper on "The Sanitary Analysis of Water."

Dr. Thomas F. Wood thanked Prof. Venable for his aid in elucidating some of these questions about drinking water. He stated that the paper would be printed by the Board of Health and distributed to each member of the Society, and given as much prominence as possible in the secular papers.

In reply to a question concerning the care of the poor not in the Poor House, Dr. Thomas F. Wood considered it a matter that devolved upon the county.

On motion, the Conjoint Session adjourned, and the Society called to order by the President.

On motion, the special order of business for the hour immediately after convening in the afternoon was made the report of the Mortuary Committee.

Dr. Thomas F. Wood announced as the subject selected for discussion, "Are the Masses Passed after Large Doses of Sweet Oil Gall-stones?"

The paper was prepared by Dr. Burbank, of Wilmington, who was prevented from attending.

The meeting adjourned.

Second Day—Afternoon Session.

The Society was called to order at 3 : 15 o'clock.

On motion, the special order of business adopted at the morning session was changed to allow the reading of the report of the chairman of Section on Practice of Medicine, Dr. L. G. Broughton.

After the reading of the report it was, on motion, referred to the Committee on Publication.

The special order of business was resumed, and Dr. S. S. Satchwell read the report of the Obituary Committee, containing an eulogy on the late Dr. Will. Geo. Thomas, ex-President of the Society.

Dr. Eugene Grissom said it would seem almost an act of supererogation to attempt to add a word of eulogy to that already pronounced upon the name of the great and good man who has passed from us. I will, however, as one having known Dr. Thomas since 1859, when, having just received my degree, I became a member of the Society, whose confréres, the great men of his day—Johnson, McKee, Manson and others—have crossed the river and are resting in the shade, and while my acquaintance with him was not intimate, it was unbroken from that period till his death. In view of these facts, it may not be amiss to pluck one laurel to place upon his grave. I knew him during the war, in its earlier months, when about Wilmington he was ever ready to contribute his skill and his labor to the benefit of the sick soldier without any regard to the sacrifice and labor it placed upon him and without reward. If there is any one object that seemed to be the great polar star of his life, of his ambition, the impression made upon my mind and the minds of those who knew him more intimately than I did, was his conscientious regard for duty—the grandest principle of the likeness to his character. He did his duty at all times and in all places, to all men, and he must have had within him a wealth of noble after-memories of noble actions and hopes of the noble felicity. He went down to the grave calmly and without a fear. His example will teach upon earth while his spirit is with God.

He moved the adoption of the report, and that a page in the minutes of the Society be inscribed to his name. Carried.

[Note.—The Report of the Committee on Credentials is summed up in the final list of new members.]

Dr. Satchwell stated that he had another paper on the death of our late ex-President, Dr. W. T. Ennett, that was not yet completed, and asked to have it referred by title to the Committee on Publication. So ordered.

The President stated that in reference to the question of registration which was discussed yesterday, the Board of Examiners wrote to the Attorney General asking him the power of the Board with unregistered men in possession of diplomas issued prior to 1875—whether they had the power to grant them a license? The Attorney General telegraphed his opinion, which is, in substance, that those who have not yet registered, but were eligible before the 1st of January, 1890, can obtain a certificate from the Board of Examiners giving them permission to register by sending to the Board a certificate, sworn to before the clerk of their respective counties, that they were qualified to register before the 1st of January.

Report of the Chairman of Section on Pathology and Microscopy.

Dr. Julian M. Baker read his report on "Progress in Pathology and Microscopy," which was referred to the Committee on Publication.

Dr. Thomas F. Wood read a paper forwarded by Dr. Thomas S. Burbank (who was absent) on "Are the Masses Passed after the Administration of Large Doses of Sweet Oil Gall-stones?"

Dr. Wood hoped the paper would be largely discussed, knowing how much interest has been lately felt in the subject by the medical public, and how ably Dr. Burbank was prepared to defend it were he present.

Dr. Payne became interested in the subject a few years ago, and as gall-stones are most common in fat women, when one came to his office with symptoms at all pointing to that trouble, he always administered large doses of sweet oil, and always with the passage of these green masses as a result. There was never a failure, and thought he could get a like result from any member present. He thought the masses supposed to be gall-stones were formed in the bowels by the emulsification of fats.

Dr. Thomas F. Wood had had quite a number of cases of indubitable hepatic colic. The oil was not supposed to relieve pain, of course, and was not given until this had been relieved by opium. After action of oil you get several substances besides gall-stones. He thought the large green masses are bile soap, but in cases of genuine hepatic colic there are in addition fragments of white particles sometimes stained a dirty green color. These white masses separated from the green ones give the reaction for cholesterin. It is not certain that these masses come from the gall-bladder, but it is certain that we get fragments of cholesterin mixed with the green masses. He has seen along with these masses clearly defined gall-stones. He held that whether sweet oil could or could not cause the expulsion of gall-stones from the bladder, in well-selected cases we certainly get fragments of cholesterin, and often permanently relieve our patients. We know that there are sometimes enteroliths in the bowels, and that they probably have their origin in the gall-bladder. Could not the cholesterin come from the oil? Not if the oil is pure. There is no doubt that sweet oil has a cholagogue effect, as shown in a paper in the *Therapeutic Gazette* for May, 1890.

Dr. Payne called attention to the fact that the pain was due to the passage of the stone through the hepatic duct, and when the oil was given after the pain had ceased, the stone being already in the bowel was easily carried out.

Dr. Thomas F. Wood referred to the intermittence of the pain in obstruction, and to the fact of post-mortem examinations frequently revealing the fact of the gall-bladder being packed with gall-stones without there having been any evidence of hepatic obstruction or colic during the life of the subject.

Dr. Payne attributed the intermittence of pain to the occasional passage of a stone.

Dr. Wood thought that if a patient is suffering intermittent pains and during an interval a dose of oil is administered with the passage of these fragments and a relief from future pains and clearing up of the icteric skin and sclerotics, it is proof of the efficacy of the oil in removing them.

Dr. Roberts mentioned a case in which a drinking man subject to bilious colic had had several attacks in a few months. He ordered a large dose of oil and the man was relieved from further trouble.

Dr. Nicholson had tried it in only one case without satisfactory results.

Dr. Monroe thought the oil acted only as any purgative would act, likening it to calomel and castor oil. He would like to see the effect of the administration of half a pint of castor oil.

Dr. McDonald mentioned the case of a large man who had suffered for weeks with gall-stones. After trying other things he gave sweet oil and ether, and he passed a great many of what he considered gall-stones, being marked by facts, the patient recovering and having no more trouble. He has had good effects from it many times in duodenitis. He believed it did remove stones in some cases.

Dr. Poole referred to a paper presented in his county Society (Rowan) in which the following facts were disclosed: A patient having a fistulous opening into the gall-bladder passed three stones through the opening. The writer analyzed these along with the masses passed from another patient after a dose of oil and the results were identical. A member of his own family had suffered a long time, and was finally relieved after two doses of oil.

The President said he was now in charge of a patient who, a few years ago, weighed only 80 pounds, now weighs 130. At that time he suffered from repeated attacks of hepatic colic. The stone was easily detected by touch through the thin abdominal walls. The attacks were accompanied by the filling of the bladder with bile. Gave sweet oil in doses of 8 ozs. in three of these attacks after emptying the bowels by a saline purgative. The masses that came away were always green-looking, like pieces of cucumber pickle, covered with mucus. The outline of the bladder was lost. He thought the oil in such large doses rushed through the stomach, and by its rapid action caused the emulsification of the bile. The stone could still be distinguished in the bladder. It was about the size of the end of his ring finger. He had come to the conclusion that the green masses were composed of oil acted on by the bile and pancreatic juice—not sufficiently emulsified for absorption and rushed through the bowel in that partially emulsified state. The passage of stones from the bladder would have caused great pain unless the ducts had been enormously distended.

The President appointed on the committee to collect statistics concerning Confederate veterans, Drs. E. Burke Haywood, S. S. Satchwell, Chas. J. O'Hagan, John McDougald, Thomas F. Wood.

Report of Committee on Therapeutics and Materia Medica.

Dr. J. W. McGee, as chairman of Section on Therapeutics and Materia Medica, made his report, which was referred to the Committee on Publication.

Report of the Committee on Nominations.

Dr. Young presented the following report of the Committee on Nominations, which was adopted :

President.—Dr. Richard H. Lewis.

Vice-Presidents.—Drs. S. W. Battle, J. L. Nicholson, W. H. Lilly.

Secretary.—Dr. J. Mack Hays.

Treasurer.—Dr. C. M. Poole.

Orator.—Dr. L. G. Broughton.

Essayist.—Dr. T. E. Anderson.

Committee of Publication.—Drs. Thomas F. Wood, W. W. Lane, J. M. Hays, Thomas S. Burbank.

Delegates to the Virginia Medical Association.—Drs. P. L. Murphy, A. R. Zollicoffer, J. M. Baker, L. L. Sasser.

Obituary Committee.—S. S. Satchwell, J. D. Roberts, W. J. Jones, George A. Foote.

Delegates to the American Medical Association.—Drs. Chas. J. O'Hagan, A. W. Knox, J. W. NcNeill, Thomas Hill, Thomas F. Wood, N. B. Herring, R. F. Lewis, S. D. Booth, Joseph Graham, John Manning, E. R. Michaux, J. M. Hadley, W. D. Pemberton, James S. Lafferty.

Delegates to the Tenth International Congress.—J. A. Hodges, A. G. Carr, Robert S. Young.

Dr. Anderson read a paper on "Extra-Uterine Pregnancy of Five Years Standing," which was referred.

On motion, the reading of a paper by Dr. Hyatt was made the special order of business for to-morrow morning.

Dr. A. G. Carr's Credentials to the International Medical Congress.

It was moved and decided that Dr. Carr's credentials as a delegate to the International Medical Congress be forwarded to him.

A Case of Typhlitis.

Dr. L. G. Broughton made a verbal report of a case of typhlitis. He was sent for with a message to bring his instruments. He found a man who had not had an action of the bowels for three weeks or more. He had been under the influence of opium for pain in the right iliac region. An examination per rectum revealed a distinct tumor on the right side. He advised an operation for obstruction. Pulse was 125, and had the appearance of a dying man. Thought it impossible to carry patient through to next day, so the abdomen was opened about three inches between umbilicus and pubis. On opening the abdomen a great quantity of very fetid liquid gushed out, so that he was afraid he had wounded the gut. Strict antisepsis was practised all through the operation. Found three very tough fibrous bands binding the bowel down, which were with difficulty broken down. The gut was drawn out and appendix found to be in a gangrenous condition and five or six times as large as usual. It was ligated and amputated. The cavity was washed out with a solution of bichloride, 1—4000, a drainage-tube put in and the wound closed. The appendix was found to contain a cherry seed, the surface being serrated as though it had been filed. His wife then gave the following history: During the past summer he had eaten some cherry pie and soon after complained of pain in the right side which had been troubling her ever since. Next morning patient was feeling better than for some time and bowels had moved three times. He administered hot water only by the mouth for two days, then milk and lime-water in small quantities. Temperature never exceeded $100\frac{1}{8}$°, and in about two months was up and attending to his business. Soon afterward, while driving in a cart, the horse became frightened and he was thrown out upon his right side. He complained of great pain and his family physician called, but he died before morning.

Opium Habit Among Negroes.

Dr. Roberts spoke of the infrequency of the opium habit among negroes, saying he had been able to collect three well authenticated cases.

Dr. Booth mentioned a case in a negro woman who had had the habit about eight years and was using 4 grs. of morphia daily. She became pregnant, and after the birth of the child never used any morphia again.

Dr. Galloway mentioned a case in his experience.

Dr. Nicholson had seen only one case in his ten year's practice.

Dr. Noble read a paper on "Opium Habit Presenting some Unusual Difficulties in Diagnosis," which was referred to the Committee on Publication.

Ought a Serious Surgical Operation be Performed on an Opium Habitué?

Dr. Holmes asked the opinion of members as to the propriety of performing a serious operation on a person with the opium habit. He thought it should not be done unless there was some prospect of curing the habit.

Dr. Littlejohn Made an Honorary Fellow.

Dr. O'Hagan moved that Dr. Littlejohn, who has been a confirmed invalid for some time, be made an Honorary Fellow of this Society, enjoying all the privileges of an active member, but being relieved from all fines and dues.

The motion was carried unanimously.

A Vesical Calculus Weighing 7¾ ozs. Removed by the Rectum.

Dr. O'Hagan presented a calculus 3½ inches long, 3 inches wide and 1½ inches thick and weighing 7¾ ozs., and gave the following brief description of the case: The patient came to him a lean, cadaverous fellow, last July, and asked him if he could do anything for paralysis. On being answered in the negative, he started to leave in great despair. Called him back, examined the bladder, discovered the presence of a calculus which he supposed to be about an inch and a half long, and told the man he could get relief only by an operation. The man consented, and, after a few days of preparatory treatment, was operated on. The main reason in reporting the case was to warn against too careless examinations in these cases as to the size of the stone. He made two examinations, but not as careful ones as he should have made, and was so dumbfounded when he found he could not extract the stone through the perineal opening. A young medical friend came to his assistance, and in working at the stone with a pair of forceps, succeeded in pushing the forceps through the vesico-rectal septum.

The operation was done a week before last Christmas. Did not think the patient could stand an extra operation for supra-pubic lithotomy, so he was sent home. To his very great surprise patient did well, and the wound in the perineum healed kindly. He concluded to try removal through the rent in the bladder, and the man being anæsthetized, the sphincter was stretched and the stone was found presenting at the opening. It was removed with very little trouble, and the opening has decreased to a small fistula which will require an operation. The patient was thirty-eight years old, and had been suffering from infancy.

Fluoresceine in Detection of Foreign Bodies and Ulcers of the Cornea.

Dr. Thomas F. Wood presented a sample of fluoresceïne, a new preparation (reported in *Johns Hopkins Bulletin*) that will prove of use in detecting lesions of the cornea. It is a yellow powder, a preparation from resorcin. It is soluble in water and makes a yellow solution with green fluorescence. It acts by temporarily staining the eye where the conjunctiva is injured. It stains a temporary yellowish color, and is entirely harmless. Samples were distributed for experiment.

A Case of Tobacco Amaurosis.

Dr. Lewis mentioned a case of tobacco amaurosis seen only a few hours before, and would like to speak of the diagonis of the disease. There are no objective symptoms, no pain, only an increasing loss of sight. He considered the presence of the "color-point" as absolutely diagnostic. In this case no benefit at all was received from the use of glasses. The patient was placed before him and directed to look at a piece of red paper which the examiner placed on his own nose. It appeared yellow to the patient. but when moved gradually to one side, the patient's eyes still fixed on the nose, it suddenly appeared red at a distance of about two inches from its former position. The same result was had from using green paper. The patient was an inveterate smoker and chewer. Treatment was simple—to give up the use of tobacco entirely.

Glasses for a Myope.

In response to a question Dr. Lewis said a simple and convenient method of ascertaining the strength of glasses needed by a simple myopic patient was to ascertain the maximum distance at which he could read very small type comfortably. If a patient is to wear glasses permanently they should be slightly weaker than than that.

Dr. O'Hagan read the following report from Dr. L. L. Staton :

A Case of Oblique Fracture with Shortening, Treated by Refracture and Readjustment—Result: Limb Lengthened 2 *Inches.*

The remarkable thing about the case was the reproduction of bone, the ends of the bone, after exsection, being some two inches apart and held there by an extension weight.

Referred to the Committee on Publication.

On motion of Dr. Way, the selection of the next place of meeting was made the special order of business for the hour immediately following the oration at the evening session.

SECOND DAY—EVENING SESSION.

The Society was called to order and the President introduced Dr. W. J. Jones, of Goldsboro, who delivered the

The Annual Oration.

After the oration a copy of it was requested for publication.

The selection of place of next meeting being in order, Dr. Broughton suggested Asheville, even though it had been more than half promised to Reidsville.

The nomination of Asheville was seconded by Dr. Purefoy, who hoped the Society would take Horace Greeley's advice to young men and "go West."

Morehead City was put in nomination by Dr. Foote, as being a central point and abounding in brain food. He thought the Society would be none the worse for the addition of a little phosphorous to their diet.

Dr. Galloway nominated Snow Hill. Snow Hill, he said, was once the proud capital of North Carolina. She is beautifully situated on the right bank of the classic Moccasin river, abounds in beautiful walks, lovely scenery and magnificent structures. (Applause and laughter.)

Dr. Foote asked if Snow Hill was in North Carolina. (Laughter.)

The vote being taken, Asheville was selected as the next place of meeting, and, on motion, the last Tuesday in May was appointed as the time of meeting.

An amendment to make the time the second Tuesday was lost.

On motion, the meeting adjourned.

THIRD DAY—MORNING SESSION.

The Society was called to order at 9 : 30.

Dr. Lilly made the following report of the Finance Committee, which was received :

Your Committee having examined the Treasurer's accounts, find them correct, as follows :

To balance on hand from last year	$ 765.60
To amounts collected	509.40
Total	$1,275.00
Expenditures by vouchers, etc	$ 799.20
Balance on hand	$ 475.80

The Committee recommend an assessment of $2.00 for the ensuing year, and that the salary of the Secretary be $125 and that of the Treasurer be $100 for next year.

Your Committee feel that the thanks of the Society are due our efficient Treasurer for the satisfactory manner in which he has discharged the duties of his office.

W. H. WHITEHEAD,
W. H. LILLY,
G. W. PUREFOY.
} Finance Com.

The reporter was voted $25.

Dr. Hays said he had failed to call for a paper prepared by Dr. Herring, and asked that it be presented now.

Dr. Herring said he had decided to wait and study the subject another year before presenting his paper.

A paper by Dr. Satchwell, on "The Influence of the Teeth on Health," was ordered read by title and referred to the Committee on Publication.

Dr. Thomas F. Wood, as chairman of the Committee on Revision of United States Pharmacopœia, made his report as follows :

Report of the Committee Delegated to Represent the Medical Society of North Carolina in the Sixth Decennial Convention for the Revision of the Pharmacopœia of the United States.

Two of your Committee, Dr. Robert S. Young and the Chairman attended the Pharmacopœia Convention held in Washington, D. C., on the 7th, 8th and 9th May. The delegation was a larger one than any of its predecessors, including some States never before represented. The South had the fewest of all, and among them only two physicians from North Carolina and two from Virginia. From all the States the strongest element was the pharmacists and chemists, many bearing the title of M.D., but few in reality being active medical practitioners. This defect in the organization of the Convention has been marked from the organization of the movement, and accounts largely for the production of a volume that has never been popular with the physicians. So far from being popular, indeed, it needed so much in the way of commentary that the only acqaintance the majority of physicians had with it was the extracts made in the various dispensatories.

The machinery for the determination of the qualificattion of delegates was imperfect, and put some of them to much annoyance before they could obtain admission to the floor of the Convention, notably your own delegates.

The retiring President of the Convention of 1880, Dr. Robert Amory, of Boston, called the meeting to order.

The discussions on the various questions of interest to the Convention had been before the pharmacal profession some months in their special journals, so that the views held by each member were well digested beforehand. The old Committee of Revision and Publication set forth "The General Principles which are to Guide the Committee of Revision for 1890," it being their prescribed duty, and upon this report hinged all the discussion.

The field of discussion of the first day was the question, whether or not crude drugs and the preparations from them should be standardized. There had been for some months previously set forth, by circulars and other media, the idea that as the drugs and preparations from them administered to our patients are liable to vary so much in their proportions of active principles, that it was a growing necessity that some standard should be adopted whereby we could all have a guarantee that when we gave ergot, or fluid extract of digisalis, or extract of conium, or any other drug having an important active ingredient, that we might have some demonstrable test, whereby we could determine whether or not our patient was getting in that drug his just proportion of the active ingredients. The discussion was confined to the pharmacists, and it was surprising to see that those who entered it with some warmth of conviction as to the feasibility of the plan, were willing finally to adopt the principles set forth by the Committee of Revision of 1880, as follows:

"*Assay Processes for Drugs.*—It is recommended that assay processes be appended to the descriptions of the more energetic or otherwise important drugs containing active principles, provided the therapeutic value of the drug depends upon the amount of these principles, and provided, also, that these principles can be assayed and identified with reasonable accuracy and without requiring complicated processes. The committee shall attach a note stating the average percentage of these active principles in good commercial samples of the drug, and, if it be found feasible, it may attach a requirement that, if the percentage passes certain upper or lower limits, the drug be rejected.

"*Assay Processes for Galenical Preparations.*—The committee may attach assay processes to such galenical preparations, as fluid extracts, tinctures, etc., but it shall omit requirements of a definite strength or percentage of active principles except in the case of drugs for which an upper or lower limit, or both, of active principles is prescribed.

"*Assay Processes for Opium and Cinchona.*—In the case of opium and cinchona, the committee shall adopt such processes of assay as will be found to yield the largest proportion of the desired active principles with greatest uniformity and with least manipulative difficulty, the object of these processes being to ascertain how much of the respective principles can practically be extracted."

Proprietary or Patented Articles.—Upon this point we are all interested, and it is the most perplexing matter that has come before the medical profession in the last ten years, and to solve it will take all the combined wisdom of the medical and pharmacal professions in the next few years.

The phraseology of the Committee of Revision of 1880 is as follows and expresses the utmost limit of the wisdom so far evolved:

That no substance which is exclusively produced by a patented process, or is protected by proprietary rights, shall be admitted into the Pharmacopœia.

It must be explained that there are several substances largely in use as medicine that are produced now as they appear in market, almost exclusively by patented processes, although they may be, and were formerly made by an open process of the Pharmacopœia.

Two, notably, are salicylic acid and chloroform; these would not be restricted by the terms of the committee. But such articles as antipyrin, antifebrin, exalgine, sulphonal and the many other new chemicals are not only exclusively made by a patented monopoly, but are copyrighted, and after the patent expires they cannot then be admitted into the Pharmacopœia. What are we to do with such substances? They are in daily use by the profession of the world, many of them will probably be permanent. It occurs to your committee that the next Committee of Revision of 1890 should be directed to determining the chemical nature of the more useful of the anilid preparations, discover, if possible, other processes for them, and if accomplished add each new one to the Pharmacopœia under such name as the committee might decide upon, and treating the chemical as any other of the older substances. It might even then be the case that the new processes discovered may be too expensive to enable the chemists to put it in competition with the original chemical, but by this method it would have a legitimate place in our official lists on the same footing with chloroform and salicylic acid.

Parts by Weight and the Metric System.—The committee of 1880 adopted parts by weight for fluids and solids, but it was not practiced by the druggists generally. The new rule suggested is weights for solids, measures for liquids, the standard for both being the metric system of weights and measures. At first sight it would seem to you that this involves the employment of dosage upon the basis of the metric system, and you would naturally express your disapprobation. It does not, however, affect any of the old rules about dosage, for the Pharmacopœia does not consider this topic, it only affects the preparation of drugs by the druggist and the manufacturing chemist. Instead of having two or three standards, they employ a standard which will thus make it uniform everywhere. It is not expected that the druggists in the smaller towns will at once adopt the decimal system, but after they find out how cheaply they can substitute metric weights and measnres for the old apothecaries and avoirdupois they will fall into it, and all the easier, as persons used to calculating in a decimal currency as we are, can soon see the convenience of it all. As we have already stated, the question of prescription-writing does not come up just now, but may in another decennium.

What we have reported cover about all the matters which specially interest us as physicians, and those of us who have to be in addition, our own druggists.

Prof. H. C. Wood, MD., LL.D., was made President of the Convention, and the Committee on Nominations, after being in continuous session from 8 p. m. until 2 o'clock next morning, chose the following gentlemen to compose the Committee on Revision for 1890, and to this number was added Dr. H. C. Wood:

Those marked * were of the committee of 1880.

*Charles Rice, Ph.D., New York, Chairman; *Prof. Joseph P. Remington, Philadelphia; Prof. F. B. Power, Wisconsin; *Prof. P. W. Bedford, New York; Dr. W. M. Mew, U. S. A.; Dr. John Godfrey, U. S. M. H. S.; Dr. J. M. Flint, U. S. N.; *Prof. J. M. Maisch, Philadelphia; Dr. C. O. Curtman, St. Louis; *Dr. F. A. Castle, New York; Dr. N. S. Davis, Jr., Chicago; *Prof. C. Lewis Diehl, Louisville; Dr. R. G. Eccles, Brooklyn; Dr. W. G. Gregory, Buffalo; Carl Mohr, Ph.D., Mobile, Ala.; *Prof. G. F. H. Markoe, Boston; *Prof. Oscar Oldberg, Chicago; Prof. L. E. Sayre, Kansas; *Prof. Otto A. Wall, St. Louis; Dr. H. H. Rusby, N. Y.; Mr. A. B. Taylor, Philadelphia; Dr. R. T. Edes, Washington; Prof. C. S. N. Hallberg, Chicago; *Dr. Thomas F. Wood, Wilmington, N. C.

The Convention was harmonious and worked with great assiduity. The prospect is that the new committee, aided by the immense work of the old in securing and publishing a digest of criticisms upon their work, will be started forward in a successful line, and will be able to complete the whole in about a year. It behooves every one of us, therefore, to consider what suggestions he wants to make as to the addition or elision of drugs, and communicate such facts to the member of the committee from this Society or directly to Mr. Charles Rice, the chairman.

It is the earnest hope of the medical members of the committee that the Pharmacopœia will be a very necessary book to the profession in its next revision, and to this end they bespeak your hearty coöperation. Respectfully submitted,

Thomas F. Wood,
Robert S. Young,
Committee.

Oxford, N. C., 28th June, 1890.

On motion, the report was received and the Committee dismissed.

Dr. J. W. McNeill introduced the following resolution regulating the election of officers :

Resolved, That the election of officers for this Society, in the future, be by ballot, and that all laws and by-laws conflicting with this resolution be repealed.

Laid over until next meeting.

Dr. Purefoy asked to have his paper read by title and referred to the Committee on Publication.

So ordered.

According to the special order of business adopted at yesterday's session, Dr. Hyatt read a paper on "Electricity in the Treatment of Uterine Disease."

Referred to the Committee on Publication.

A paper on "Electricity in Gynecology," by Dr. ———————, was read by title and referred to the Committee on Publication.

Dr. Thomas F. Wood asked Dr. Hyatt's views as to the best way for a beginner to provide himself with an electrical outfit that he might make a study of its application. He also asked what make of milliampéremeter he considered best. He thought the profession was at the mercy of the electricians, who could send out any kind of machines, and when the results from their use were nil or unsatisfactory, the treatment fell into disrepute, while we know that good results are obtained from it.

Dr. Hyatt recommended that one should first learn to make a battery for himself. He would recommend the "Dead Beat" milliampéremeter, made by the Galvano Manufacturing Company, New York. He offered to write a paper on the subject to be published in the JOURNAL.

Dr. Hyatt read a communication tendering his resignation as a member of the Society. He explained that he hoped not to discontinue his attendance on the meetings, and hoped his resignation would be accepted.

With some protests from members the resignation of Dr. Hyatt was accepted.

Dr. Whittington read a paper on "Fibroids of the Uterus," which was referred to the Committee on Publication.

The President appointed on Dr. Poole's resolution the following

Committee: Drs. C. M. Poole, T. D. Haigh, J. J. Summerell, Thomas F. Wood, R. H. Lewis.

The time having arrived for the installation of the new President, Drs. Wood and Lilly were appointed to conduct him to the Chair.

In tendering the gavel to his successor President Thomas said: "Fellow-members of the North Carolina Medical Society, I congratulate you upon the wisdom of your choice for your next President. It is a feeling of great satisfaction to the out-going administration that if any shortcomings have marred its progress they will be effaced by the administration we will now inaugurate."

President Lewis replied as follows: "If I can succeed in administering the affairs of the Society as well as my predecessor I will be more than satisfied. I would be less than human if I did not feel deeply flattered by this evidence of your partiality. To be the recipient, at my age, of such an honor from such a body of men as the Medical Society of North Carolina, is a compliment exceedingly grateful to me. I have always taken great pride in the Society—its success and the elevation of the profession in the State have for years been very dear to my heart. Whenever an opportunity has presented it has always been my pleasure to strike a blow for those objects. By not abating, but by increasing every effort, in the future I hope to prove that your confidence was not misplaced. But to attain these ends I must bespeak your coöperation and support in an administration which I promise you to the best of my ability to lead without fear, favor or prejudice.

The President asked for any further voluntary papers.

A Case of Typhoid Fever.

Dr. Wilson said that during the past season he has had considerable typhoid fever. He asked for the opinion of the Society in regard to one case that puzzled him and his consultant no little. This case was one of unusual length and very mild as regarded temperature, but tedious. Ran on until about the fifth week with no extra emaciation, the temperature never unmanageable, but there arose a symptom for which he could discover no cause, and the result was something unusual. He would say the case recovered. In the fifth week pulse became very rapid, having been only moderate before. During the next two weeks it was never under 135 and often reached 145, while the temperature never exceeded 102°, and rarely that much. He could not understand the cause of the disproportion between pulse and temperature. Patient lived near by, and he saw him frequently. The patient was never delirious. Attributes recovery to the fact that the stomach never gave way.

Antipyrin a Substitute for Tracheotomy in Diphtheria.

Dr. Robinson reported a case to which he was called to perform tracheotomy. The case was a little girl suffering from diphtheria. When he arrived the paroxysm had passed off to some extent. The case was left until the next morning, when it was no better, but still the attending physician thought it had better be put off a while longer. He was called for soon after and went prepared to do the operation. He explained to the father the dangers of the operation, but he concluded to have it performed. He suggested the administration of antipyrin in 5-grain doses every half hour until the physiological effect was produced. It had been given in the morning, but at intervals of two hours. Four or five doses were weighed out and administered before leaving. He told the attendant physician what he had done and the latter said: "Well, all chance is gone now, for that will weaken its heart." His object in giving the drug was based on his experience demonstrating to him the power of the drug in causing a free discharge from the mucous membranes of the trachea and bronchi. It had been demonstrated in a case of malarial (so-called typhoid) fever, in which 20 grains were administered with resulting cyanosis, which, however, was easily overcome by stimulants.

On seeing the little girl next morning found her breathing as naturally as he was and playing with her doll. Membrane commenced to form again about 12 o'clock, but the child would not retain the antipyrin. He performed tracheotomy the next morning, but the child died soon after. He suggested that if he had administered the antipyrin hypodermically with digitalis, the desired result would have been obtained. He thought that antipyrin could be carried to its full extent, and thought we might find in it a remedy for the disease. Has used antipyrin considerably and does not find it a greater heart depressant than antifebrine. It is a better nerve sedative. Had a case suffering from cardiac trouble accompanied by asthenia, in which antipyrin and the bromides gave more relief than morphia.

Dr. Thomas F. Wood read a paper on "Erhlich's Urinary Test for Typhoid Fever."

Dr. Wood's paper was referred to the Committee on Publication on motion of Dr. Way, who also asked to have it published in the JOURNAL at as early a date as possible, so that it might be used during the present typhoid season.

A Fractured Skull with History of the Cause of Death.

Dr. Hays presented a specimen of a fractured skull in which all three of the fossæ were fractured, one running through the orbit to the optic foramen, the other including the zygoma, passing through the petrous bone to the foramen magnum. Statistics say that in only 10 per cent. of all cases of fracture of the base do we find all three fossæ involved. The middle meningeal artery was ruptured and a clot weighing about 3½ ounces was found. The question arose as to the possibility of the man's ability to walk and talk rationally after the blow that caused the fracture. An answer was not given by any member.

The Object of the Registration of Physicians and Other Matters Relating to the Amended Law.

The President alluded to the discussion of the previous day in which it was brought out that many physicians had not registered. He thought the object of registration was not fully understood. It is simply to have a correct list of the physicians, whether regular or irregular, in order that the laws might be enforced against those that come after. Where before there were several classes, this reduces the number to two—those who have registered and are thereby eligible to practice and those who are not. He suggested that members interest themselves in their counties in getting those who have not registered to do so in the way laid down by the Attorney General. He suggested that a written opinion of the Attorney General be sent to every clerk in the State.

Dr. Way said he was the only member of the State Society in his county, and he therefore thought it his duty and appointed himself a committee of one to see that the laws were complied with. He found the names of two men whom he had never heard of before, and believing them to be illegally registered wrote to the

Attorney General as to the duties and powers of the clerks in the case of illegal registration. He answered that while it was not perfectly clear to his mind, he thought it the duty of the clerks to see that the applicants were qualified, and if he found the registration improperly made, he had the right, after due notice, to revoke the registration. He had the two men notified and one of them returned his license, the other claiming to have lost his. The man and six respectable citizens of his section were summoned to appear at court. This frightened the man, with the result that the license found its way to the clerk's office, and now both these certificates are cancelled. He thought a like interest on the part of all others would result in good and a more faithful observance of the law.

Chairmen of Sections.

The President announced the following gentlemen as chairmen of sections:

Practice.—W. H. Harrell.

Surgery.—Oscar McMullen.

Obstetrics.—W. P. Whittington.

Gynecology.—J. W. Long.

Materia Medica.—K. M. Ferguson.

Anatomy and Physiology.—W. A. Graham.

Pathology and Microscopy.—Albert Anderson.

Therapeutics.—W. H. Wilson.

State Medicine and Medical Jurisprudence.—J. M. Taylor.

Leader of Debate.

The President appointed Dr. W. C. Galloway Leader of Debate.

It is Illegal to Practice Medicine at all without being Registered.

Dr. Hays called attention to the fact that in Section 5 of the practice law the words "for fee or reward" are left out, making it illegal now to practice medicine or surgery at all unless registered.

Dr. Thomas F. Wood tested the specimen of urine given him from a patient with fever, and as it did not respond he felt safe in declaring that the patient was not suffering with typhoid fever.

Dr. Booth verified the test by stating that this morning he found the temperature had fallen nearly to normal and he looked for it to clear up entirely in a day or two.

Typho-Malarial Fevers.

Dr. Robinson asked Dr. Wood's opinion as to the nature of the continued fevers, or so-called typho-malarial.

Dr. Wood said in reply that quite recently Surgeon Kenyoun, of the Marine Hospital Service, had recently discovered in the intestine of a fever patient Eberth's typhoid bacillus, and had demonstrated the malarial plasmoid in the blood. If the presence of this bacillus and the plasmodium were admitted to be diagnostic, here we have, according to this reputable microscopist, both in the same patient. This looked like a clear demonstration, and when we couple such items with clinical facts, it looks as though there is such a thing as typho-malarial fever.

Thanks to Retiring Board of Medical Examiners.

Dr. Way offered a resolution relating to the Board of Examiners, which was adopted after a slight amendment by Dr. Summerell.

[Dr. Way's original resolution was not received by the Committee on Publication. The purport of the resolution is that the thanks of the Society are due to Drs. Wm. R. Wood, W. J. H. Bellamy, J. A. Reagan, Willis Alston, P. L. Murphy, A. W. Knox and Francis Duffy, composing the Board of Medical Examiners of North Carolina, for the successful manner in which they have conducted the very arduous duties of Examiners for the past six years, assuring these gentlemen of the entire approbation of their confréres.]

The President suggested that the profession of Asheville select their committee of arrangements for the next meeting at as early a date as possible and send same to the Secretary.

A Call for Relics of Confederate Medical Department.

Dr. Satchwell, for the Committtee on the Collection of Statistics Relating to Confederate Veterans, asked to have sent to one of the committee any papers or information any member was possessed of.

It was voted that successful applicants before the Board of Examiners could join the Society after adjournment by reporting to the local members of the Committee on Credentials and signing the books in the possession of the Secretary.

A Case of Traumatic Stricture of Œsophagus.

Dr. Booth presented a patient suffering from a traumatic stricture of the œsophagus at the cardiac orifice, the result of swallowing concentrated lye. He wanted to impress especially upon the younger members two things: 1st. No matter how severe the case may be, do not despair of relieving it by dilatation. 2d. And no matter how high an authority says it cannot be relieved.

The patient came to him about four years ago with a complete stricture. He had no bougie suitable, so he tied two urethral bougies together, but could not push out the substance that closed the little opening. He digested it with pepsin and muriatic acid. Procured some œsophageal bougies, but thinking them too stiff and liable to injure the tube, returned to the little ones. Patient was advised to go to an eminent surgeon, who advised gastrotomy. This the patient objected to till he had consulted his home physicians, and when he came back Dr. Booth advised him to put off the operation till all other means had been tried and failed. He tried olive-pointed bougies, but could not introduce even the smallest. Had a set made of whalebone from 1-32 of an inch up, increasing by 1-32 inches.

The patient was sent to one of the most eminent surgeons in the United States, who told him there was no stricture except just below the glottis, and that the trouble lower down was reflex. The patient has a long neck, and the surgeon passing his probe to the cardiac stricture thought it had entered the stomach, though the patient insisted that he had not. The stricture has been dilated now to ¼ inch, and he thinks he will cure it entirely.

Dr. Cheatham had a case of stricture of the œsophagus in which the patient was kept alive for six months by rectal alimentation.

Dr. Roberts mentioned the case of a girl who drank concentrated lye. He was called in afterwards to treat her for a gastritis which seemed to threaten life. For ten days she took nothing on the stomach, and the gastritis was cured. About a month after stricture of the œsophagus developed, and he was glad to say he commenced treating it early enough to prevent a complete stricture. He used metal œsophageal tubes, beginning with one about ¼ inch in diameter and gradually increasing to ½ inch.

Dr. Booth found that when, in introducing the bougie, the stricture was reached, a sip of water will set up peristaltic action of the œsophagus and assist the introduction.

The President asked for unfinished business.

What Relations have the County Medical Societies with the State Medical Societies?

Dr. Booth asked what relation the County Societies have to the State Society. He hoped they work under the auspices of the State Society.

Dr. Hays referred him to the Section of the Regulations of the Society bearing on that subject.

Dr. Baker called attention to the fact that the COMMITTEE ON SCIENTIFIC INVESTIGATION had made no report for two or three meetings.

The President read the resolution by which the last six Presidents of the Society were to constitute this committee, and requested the Society to make a note that the matter had been referred to, and that the present committee are expected to be heard from next year.

The report of the Committee on the Pittman Prize asked for further time, and that they be permitted to render their decision after adjournment. Request granted.

Resolution of Thanks.

The following resolution was adopted:

Resolved, That we, the members of the Medical Society of North Carolina tender our sincere and most hearty thanks to the good and hospitable people of this lovely city of Oxford for their unlimited and most courteous hospitality extended to us during this meeeting, and to all others who have in any way added to the comfort and pleasure of the members of this Society.

New Members.

The following is a list of the new members admitted:

Dr. J. P. Munroe,
" John W. Booth,
" T. L. Booth,
" John Sweaney,
" J. S. Lafferty,

Dr. W. G. Stafford,
" B. W. Hathaway,
" J. H. Marsh,
" L. A. Hanks,
" P. B. Loftin,
" A. L. Gibbon,
" W. A. Graham,
" R. B. Henderson.
" J. L. Ray,
" C. E. Hilliard,
" S. H. Kenedy,
" J. C. Kirkman,
" W. B. Crawford,
" J. L. Edgerton,
" I. G. Riddick,
" W. H. Cobb, Jr.,
" J. W. White,
" J. P. Fearington,
" E. G. Moore,
" J. J. Menn,
" E. R. Michaux,
" M. R. Braswell,
" B. Chears,
" I. M. Lynn,
" J. N. Peace,
" James R. Rogers,
" E. P. Snipes,
" E. C. Laird,
" R. A. Morton
" R. D. Jewett.

On motion, the Society adjourned to meet in Asheville on the last Tuesday in May, 1891.

[The following gentlemen compose the Committee of Arrangements appointed by the Buncombe County Medical Society to make the necessary preparations for the meeting of the Medical Society of North Carolina in Asheville on the last Tuesday in May, 1891. M. H. Fletcher, M.D., Chairman; J. S. Grant, Ph.G., Secretary; S. W. Battle, M.D., W. P. Whittington, M.D., H. Longstreet Taylor, M.D., Major William E. Breese, President First National Bank, Charles D. Blanton, Mayor of the City.]

MINUTES OF THE BOARD OF MEDICAL EXAMINERS OF 1890.

Oxford, N. C., 24th May, 1890.

The Board of Medical Examiners of North Carolina met in annual session at the Hotel Irwin at 9 o'clock a. m., May 24th, 1890.

Present, Dr. A. W. Knox, Examiner on Obstetrics; Dr. F. Duffy, Examiner on Surgery, etc.; Dr. Willis Alston, Examiner on Practice of Medicine, etc.; Dr. P. L. Murphy, Examiner on Anatomy; Dr. W. J. H. Bellamy, Examiner on Materia Medica, etc.

Absent, Dr. Wm. R. Wood, President, and Examiner on Chemistry; Dr. J. A. Reagan, Examiner on Physiology, etc. (The last two Examiners appeared on Monday morning.)

In the absence of the President Dr. Knox was called to the Chair and the minutes of the last meeting were read, and, after some additional matter was added, they were approved.

It was moved by Dr. Alston that that portion of the minutes of 1889 in reference to the indiscriminate dispensing of intoxicating liquors and beverages upon prescriptions of physicians shall be published in one religious newspaper of each denomination in North Carolina, and also in the *Churchman*, published in New York. Carried.

It was moved and carried that Drs. Duffy and Knox be appointed a committee to write and consult the Attorney General in regard to those physicians who failed to register on or before the 1st day of January, 1890, having been qualified to do so, and also concerning those who registered from having been in practice prior to March 7th, 1885, but have never received a license from the Board, and are now known to be guilty of grossly immoral conduct; and to ask the question: Can this Board annul the registration certificate and take away the privilege of such men from practising in this State?

The letter was as follows:

Oxford, N. C., May 24, 1890.

Hon. T. F. Davidson, Attorney General, Raleigh, N. C.:

Dear Sir:—There are a number of physicians in North Carolina who, according to the terms of the recent amendments to the laws regulating the practice of medicine in this State, were entitled to register before January 1st, 1890, as legally qualified practitioners of medicine, but who, from various causes, failed to exercise this privilege during the time prescribed by law, and have therefore, under the operations of the law, become debarred from practising medicine. Some of these persons are *licentiates* of the Board of Medical Examiners; others are *not.* The Board of Examiners find themselves in an awkward position, owing to this unexpected hardship, which has befallen many, and desire, if they can *lawfully* do so, to exercise their discretion in licensing such persons *without examination*, so as to restore them to their rights, as contemplated under the law. It is obvious that many of these men would not be able to stand the examinations, as they are now conducted; and the examiners are unwilling to hold merely formal and farcical examinations, and then confer on these new "licenses or diplomas" setting forth high qualifications and couched in the same language as the license obtained by those who have successfully stood the severe tests.

We desire from you an expression of opinion as to the *extent* of the power of the Board of Examiners in these matters, and as to the legality of favoring such form of license and conferring the same on the persons in question *without examination*, so as to restore them to their former rights, which have been forfeited through inadvertence or unavoidable circumstances.

There are good reasons why the time limiting the privilege of registration *should not be* extended by the Legislature; for instance, one, making oath that he had been in the practice of medicine before a certain time, was allowed to register. This was sometimes construed to admit druggists and charlatans not contemplated as practitioners under the law.

We desire to ask your opinion on another point, viz: The Board of Examiners are empowered, under the law, to *rescind* licenses of *licentiates* guilty of "grossly immoral conduct." Are the powers of the Board, in these respects *restricted to persons having licenses*, or are they the custodians or guardians of the morals of *all* the legally qualified practitioners of the State?

It would be obviously unjust and discriminating if *licentiates* of the Board could be debarred from practising medicine on account of grossly immoral conduct, while other practitioners, *not licentiates of the Board*, *could not* be so debarred for the same cause. For your convenience we enclose a copy of the codified laws on these subjects, including recent amendments.

Please let us hear from you as soon as possible during the present session of the Board, as these are questions requiring an early solution and likely to occur on Monday or Tuesday.

Direct your communication to Irwin Place Hotel.

Very respectfully,
FRANCIS DUFFY,
A. W. KNOX,
Committee.

The following is the reply of the Attorney General:

STATE OF NORTH CAROLINA, DEPARTMENT OF JUSTICE,
OFFICE OF THE ATTORNEY GENERAL,
ALEXANDER, N. C., May 28th, 1890.

Messrs. Francis Duffy and A. W. Knox, Com'ittee, Oxford, N. C.:

Gentlemen:—Your letter of the 24th just reached me last night. Apprehending that you might have occasion to act upon the matter before a letter could reach you, I this morning telegraphed my opinion upon the first point submitted. The conclusion I reached is that the purpose of the creation of the Board being to provide a test for the qualifications of those who may desire to engage in the practice of medicine in this State, where a person has submitted once to that test and has been found possessed of the necessary qualifications, it was not essential that another examination should be had before he was entitled to register under the recent act. The first examination will be presumed to have furnished all the information to the Board necessary to the exercise of its powers to license. I do not mean to say the Board is bound in every instance to grant the license without an additional examination, for there may be cases in which it would be proper to re-examine the applicant, but I think a sensible and practical construction of the law will confer upon the Board sound discretion in the matter. For reasons satisfactory to itself the General Assembly exempted those persons designated in the last *proviso* of Section 3,132 of the Code, as it now stands, from an examination by the Board, and I think they are upon the same footing as those who have been licensed after examination. The Board might, however, feel it right to exercise the discretion, which I have said they have, in respect to those who have been examined and licensed, with greater caution. The reasons for this are obvious, doubtless, to the profession.

I am inclined to the opinion that the power to revoke license under Section 3,133 of the Code is confined to those cases where the Board has granted the license. Since the Registration Act, it might be, the Board, under the conditions imposed in the Statutes, could reverse or vacate the license issuing upon a proper registration, but this is conjecture, and I venture to suggest that it will be more prudent not to attempt the exercise of a doubtful power in so delicate and grave a matter.

The General Assembly will be in session before the next regular meeting of the Board, and no doubt will amend the law in all proper respects.

Hoping the delay in responding to your letter has given the Board no inconvenience, I am, very respectfully,

Theo. F. Davidson,
Attorney General.

During the interim between the annual meetings of the Board in 1889 and 1890 temporary licenses were issued to the following:

Dr. L. L. Vann,
" Alexander Mack,
" C. L. Summers,
" W. E. Warren,
" John J. Peacock,
" Reuben H. Bryant (col.),
" Charles C. Christian,
" Robert D. Jewett,
" J. H. Peel,
" R. E. Hinman,
" A. D. Horah,
" A. V. Jova,
" E. C. Laird,
" A. E. Reid,
" D. P. Whitly,
" J. F. Sanderford,
" L. B. McBrayer,
" H. L. Baird,
" G. M. Hackler,
" J. N. Gill.

It was ordered by the Board that the *Rules* governing written examinations be read to each class before commencing the examination, and that, if an applicant should leave the hall for an unusually long time (his name and the time of leaving the hall being recorded by the Examiner on duty), when he returns he shall be given a question different from the one upon the blackboard at the time of his leaving the hall.

There were 72 applicants for license. The following were successful, viz :

Dr. John T. Strickland, Castalia, N. C.
" Robert D. Ross, Charlotte, "
" Rhodes E. Nichols, Dayton, "
" Robert S. Primrose, Newbern, "
" George T. Mewborn, Snow Hill, "
" William McAllister, Milledgeville, "
" James C. Williamson, Whiteville, "
" Alston D. Horah, Salisbury, "
" John Spicer, Goldsboro, "
" John J. Peacock, Saratoga, "
" Arthur O. Jones, Rogers' Store, "
" L. L. Sawyer, Elizabeth City, "
" Richard E. Hinman, Charlotte, "
" Leon E. Norfleet, Tarboro, "
" Rufus J. Teague, Alpha, "
" Charles C. Hubbard, Wilkesboro, "
" Alexander Mack, Red Springs, "
" Luther L. Vann, Winston, "
" Robert J. Nelson, Bethel, "
" William R. Mayo, " "
" Wm. S. Windsor, Cross R'ds Church,
Yadkin County, "
" John B. Shamburger, Asbury, "
" Charles P. Ambler, Asheville, "
" G. W. Kughler, Jr., Washington, "
" Robert D. Jewett, Wilmington, "
" John F. Sanderford, Creedmore, "
" Daniel P. Whitly, Big Lick, "
" Robert M. Reid, Steel Creek, "
" N. M. Blaylock, Banks, Wake Co., "

AN OPEN LETTER

—TO THE—

MEDICAL PROFESSION ! !

THE INFANT FOOD PROBLEM SOLVED.

NEW YORK, May 1, 1890.

The Annual of the Universal Medical Sciences for 1889, says: "A perfect Infant Food is still a desideratum; such a food will probably be evolved in the mind of some manufacturer who understands the physiology of infantile digestion and the chemistry of milk. A substitute for human milk to approximate the latter closely should be made entirely from cow's milk, without the addition of any ingredient not derived from milk."

"But not alone do we demand that these Milk Foods contain the equivalent of the solids in human milk, and especially of the albuminoids derived from milk, but that the latter be gathered with the utmost care from properly fed animals, transported with the least possible jolting to the factory, maintained during its transit at a low temperature, then transferred to an apparatus for sterilization, and immediately after the latter has been accomplished reduced to a dry state, in order to prevent the formation of those organisms which Loeffer, Pasteur, and Lester have found to develop in fluid milk after boiling under an alkaline reaction. If such a preparation be put into air-tight and sterilized jars, all will have been accomplished that can be done to render the food sterile, and thus fulfil the chief indications in the prevention of the most serious gastro-intestinal derangements."

"Such a food, too, would have the advantage of being easily and rapidly prepared by addition of sterilized water, affording an altogether sterilized food."

To the *Medical Profession* at large, we submit for examination and trial the perfected Milk Food known as LACTO-PREPARATA. We claim that LACTO-PREPARATA is an *ideal Infant Food*, and that it fulfills the above requirements in every particular, except the partial substitution of cocoa-butter for unstable milk fat. This substitution was made by advice of Prof. Attfield, London, who made extensive tests of its food value and digestibility in the London Hospitals for Infants.

LACTO-PREPARATA is made from cow's milk evaporated in vacuo a few hours after it leaves the udder. In order to have the product correspond in composition with breast-milk, sufficient milk-sugar is added to bring up the carbohydrates and reduce the albuminoids to a proper proportion (17 per cent). The casein is partially pre-digested (30 per cent), and the remaining portion is rendered like human milk in character and digestibility. The ingredients are perfectly sterilized and placed in hermetically sealed cans; the powdering, bolting, and canning are done in an air-tight room, all air entering and leaving this room is forced by a blower through heavy layers of cotton. LACTO-PREPARATA is adapted more especially to infants from birth to six months of age; *and by the addition of water alone represents almost perfectly human milk in taste, composition, and digestibility.*

Another product of our laboratory which has been before the profession for a number of years is CARNRICK'S SOLUBLE FOOD, which, as now prepared and perfected, contains 37½ per cent of the solid constituents of milk, 37½ per cent of wheat with the starch converted into dextrine and soluble starch, and 25 per cent additional milk-sugar. For infants over six months of age it is perfection in every respect; for infants younger than this, LACTO-PREPARATA is more suitable; although *Soluble Food* has also been used largely from birth with the most satisfactory results.

Samples will be sent prepaid, also pamphlet giving detailed description.

REED & CARNRICK.

NEW YORK.

NC Med J (OS) 25:437, #6, June 1890

UNIVERSITY OF PENNSYLVANIA.

MEDICAL DEPARTMENT.

The 125th ANNUAL WINTER SESSION will begin Wednesday, October 1st, 1890, at 12 M., and continue seven months.

The PRELIMINARY SESSION begins September 22nd; the SPRING TERM early in May, 1891.

The Curriculum is graded and three annual winter Sessions are required. Practical instruction, including laboratory work in Chemistry, Histology, Osteology and Pathology, with Bedside instruction in Medicine, Surgery and Gynæcology are a part of the regular course and without additional ex-expense.

For Catalogue and announcement containing particulars apply to Dr. JAMES TYSON, Dean,
36th and Woodland Avenue, Philadelphia.

PREPARATORY SCHOOL OF MEDICINE

—OF THE—

UNIVERSITY OF NORTH CAROLINA.

The Session of 1890–'91, will open the first Thursday in September, and last nine months. This School is designed to furnish the medical student with as complete instruction as possible in those subjects which constitute the foundation of medical science, but which too frequently do not receive the attention they merit, and to thus facilitate his subsequent labors by enabling him to study the higher branches of medicine with intelligence and success. Its connection with a well-equipped University makes its superior to a year's reading under any preceptor, while it is believed that it will compare favorably with the first year course of our best medical colleges. The course comprises instruction in Chemistry, Physics, Botany, Anatomy, Physiology and Hystology, and Materia Medica. Every endeavor will be made to give students a practical knowledge of anatomy; dissecting is compulsory, and the use of the microscope will be taught.

For Catalogue, or further information, address.

RICHARD H. WHITEHEAD, M.D.,
or, **KEMP P. BATTLE, President,**
Chapel Hill, N. C.

Dr. C. H. Sexton, Raleigh, N. C.
“ J. Watts, Taylorsville, “
“ Kenneth A. Blue, Hasty, “
“ Daniel W. Courts, Reidsville, “
“ James R. Jerome, Mint Hill, “
“ William E. Headen, Pittsboro, “
“ Edward H. Bowling, Luster, “
“ Charles B. Hargrove, Tarboro, “
“ Duncan J. Watson, Southport, “
“ S. S. Flynt, Rural Hall, “
“ Jesse C. Bradsher, Olive Hill, “
“ John A. Gaddy, Cedar Hill, “
“ D. E. Caldwell, Chapel Hill, “
“ James T. Bynum, Germanton, “
“ Marcus W. Alston, Louisburg, “
“ Paul N. Melchor, Concord, “
“ C. L. Jenkins, Tarboro, “

The following resolution was offered by Dr. Knox, and unanimously adopted:

WHEREAS, In the April number of the NORTH CAROLINA MEDICAL JOURNAL, the suggestion is made by a correspondent that two or three members of the present Board of Examiners be reëlected at this meeting of the Society; and

WHEREAS, It has come to the ears of the Board that a rumor is current which credits some members of that body with the desire for reëlection, it is herewith *unanimously*

Resolved, That, while we are grateful to the JOURNAL'S correspondent for the words of commendation uttered by him, yet we do not think it advisable, under all the circumstances, that *any* member of the present Board be reëlected.

Resolved, That we repudiate the floating statement referred to above, as doing us a great injustice; and we declare our *unanimous* conviction that the *honors*, *responsibilities and labors* which attend and follow election to the Board of Medical Examiners should not be given to its members for a longer period than one term.

Resolved, That a copy of these resolutions be sent to the President of the North Carolina Medical Society with the request that he read them to that body, and that we affix hereto our several names.

WM. R. WOOD, M.D., President,
A. W. KNOX, M.D.,
WILLIS ALSTON, M.D.,
P. L. MURPHY, M.D.,
FRANCIS DUFFY, M.D.,
JAS. A. REAGAN, M.D.,
W. J. H. BELLAMY, M.D., Secretary.

An oral examination on account of sickness in the individuals themselves or in their families, was allowed Dr. Robert L. Walker, Dr. J. T. Rieves, Dr. M. E. Gattis, Mrs. M. T. Fitch, Dr. John H. Peele, and, in consequence of a Colles fracture of right radius, was allowed Dr. Leon. E. Norfleet.

The written examinations were as follows: Anatomy, Monday, a. m.; Surgery, Monday, p. m.; Practice of Medicine, Tuesday, a. m.; Materia Medica, Tuesday, p. m.; Obstetrics, Wednesday, a. m.; Physiology, Wednesday, p. m.; Chemistry, Thursday, a. m. At the close of each examination it was announced on the blackboard which branch would be taken up next (in order, as above).

An election for a new Board having been held, the gentlemen elected held a conference with this Board. Dr. Charles J. O'Hagan, who happened to be present, was asked to preside, and Dr. W. J. H. Bellamy was requested to act as Secretary.

After an interchange of views, in a most felicitous manner, the following resolution, by Dr. Murphy, that those physicians who failed to register and were qualified to do so, either by former examination or by legal statute, the Board may, in their discretion, issue them license without fee. Carried unanimously.

It was moved that a committee, consisting of Drs. Murphy, Knox, Duffy, R. L. Payne, Jr., and Geo. G. Thomas, draw up a form of certificate to issue to that class of physicians alluded to.

The following was the form reported, which was unanimously adopted:

Whereas, ———————————— having failed to register before the first day of January, 1890, as provided by law, hath applied to the Board of Medical Examiners of North Carolina for license to practice medicine, therefore we, by virtue of discretionary authority vested in us by law, do hereby issue to him license to practice medicine in the State of North Carolina.

[SEAL.] { Signed by the members of the Board in office. }

The following, offered by Dr. Geo. G. Thomas, was adopted:

Resolved, That the license contemplated in the form just adopted shall be understood to be issued to the applicant upon the certificate of the Clerk of the Superior Court of his county that he was a physician practising medicine as a means of livelihood prior to March 7th, 1885, and when the Board of Examiners shall be satisfied that he is of good moral character.

The Conference ending, the Board resumed their work. Their arduous duties, night and day, were faithfully performed, and the Board adjourned Saturday, at midnight, *sine die*.

W. J. H. BELLAMY, M.D.,
Secretary.

SOME VALUABLE STATEMENTS.

Below will be found some interesting statements which have been tabulated for easy reference, showing some of the work of the Board from 1885 to 1890—both years included :

NAMES OF COLLEGES.	Graduates Licensed.	Graduates Rejected.	Non-Graduates Licensed.	Non-Graduates Rejected.
University New York	25	....	1	2
" Pennsylvania	3	....	2	....
" Maryland	71	11	3	6
" Virginia	12	....	4	2
" of Vanderbilt	4	8	....	1
" South Carolina	....	....	....	1
" Louisiana	2	....	....	....
" Louisville	3	3	....	....
" Michigan	1	....	....	....
" Georgia	1	1	....	....
Bellevue Medical College	17	3	1	3
Atlanta Medical College	3	4	1	....
Medical College Virginia	3	....	2	1
Charleston Medical College	....	1	....	....
Louisville Medical College	14	8	1	4
Baltimore Medical College	3	4	1	....
College of Physicians & Surgeons, Baltimore	64	21	7	14
College of Physicians and Surgeons, N. Y.	3	....	....	1
Kentucky School of Medicine	5	2	....	....
Leonard School of Medicine	11	2	....	3
Jefferson Medical College	35	2	5	3
Southern Medical College, Atlanta	2	2	....	....
Medical College of South Carolina	5	....	1	1
Long Island Medical College	3	....	....	....
Woman's Medical College, Philadelphia	1	....	....	....
Nashvile Medical College	....	....	1	....
Baltimore University School of Medicine	1	1	....	....
Medico Chirurgical College, Philadelphia	1	2	....	....
No College at all	....	....	1	4
Western Reserve University, Cleveland, O.	1	....	....	....
Tulane University, Louisiana	1	....	....	....
Eclectic Medical College, Atlanta	....	1	....	....
Howard University, Washington	....	1	....	....
N. Y. Homæopathic H. Medical College	1	....	....	....

1885	84	Licensed.	17	Refused.
1886	46	"	15	"
1887	34	"	14	"
1888	36	"	17	"
1889	46	"	17	"
1890	46	"	26	"
Totals	292	Licensed.	106	Rejected.

READING NOTICES.

Remarkable Fecundity.—I was called to see Mrs. E. T. Page, January 10th, 1890, about 4 o'clock a. m.; found her in labor and at full time, although she assured me that her "time" was six weeks ahead. At 8 o'clock, a. m. I delivered her of a girl baby; I found there were triplets, and so informed her. At 11 a. m. I delivered her of the second girl, after having rectified presentation which was singular, face. hands and feet, all presented, I placed in proper position, and practised "version." This child was "still-born," and after considerable effort by artificial respiration it breathed and came around "all right." The third girl was born at 11 : 40 a. m. This was the smallest one of the four. In attemptlng to take away placenta, to my astonishment I found the feet of another child. At 1 p. m this one was born; the head of this child got firmly impacted at lower strait, and it was with a great deal of difficulty and much patient effort that it was finally disengaged; it was blocked by a mass of placenta and cords. The first child has its own placenta; the second and third had their placenta; the fourth had also a placenta. They weighed at birth in the aggregate nineteen and a half pounds without clothing; first weighed six pounds; second five pounds; third four and a half pounds; fourth four pounds. In the country, and "backwoods" at that, it was impossible to procure a "wet nurse," so with the little help we could control, and feeding the babies on "Reed & Carnick's Infant Food," They thrived well. Prom using all the foods on the market I long since found that the above food possessed some qualities that I failed to find in the others. Mrs. Page is a blonde, about 36 years old, has given birth to 14 children, twins three times before this; one pair by her first husband. She has been married to Page three years and has had 8 children in that time. I have waited on her each time. Page is an Englishman, small, dark hair, age about 26, weighs about 115 pounds. There was an amusing incident when I told him that his wife would give birth to 4 children; he fell across the bed by his wife's side, threw his heels away up in the air, clasped his legs with both hands, and, with a long wail of despair, cried : "Lord God, Doctor ! what shall I do ?" They are in St. Joseph, Mo., now, having contracted with Mr. Uffner, of New York, to travel and exhibit themselves in Denver, St. Joseph, Omaha and Nebraska City, then on to Boston, where they will spend the summer. The birth of quadruplets is not so remarkable, but that they should live and thrive as these have done, is. In about 375,000 births there are quadruplets, and it is a remarkable fact that they always die. Will some of my brother M.D's give us their experience with quadruplets ?

Ingersoll, Texas. J. De Leon, M.D.

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The Prescribed Dose produces a feeling of buoyancy, removing depression or melancholy, and hence is of great value in the treatment of MENTAL AND NERVOUS AFFECTIONS.

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